SANYO

FILE NO.

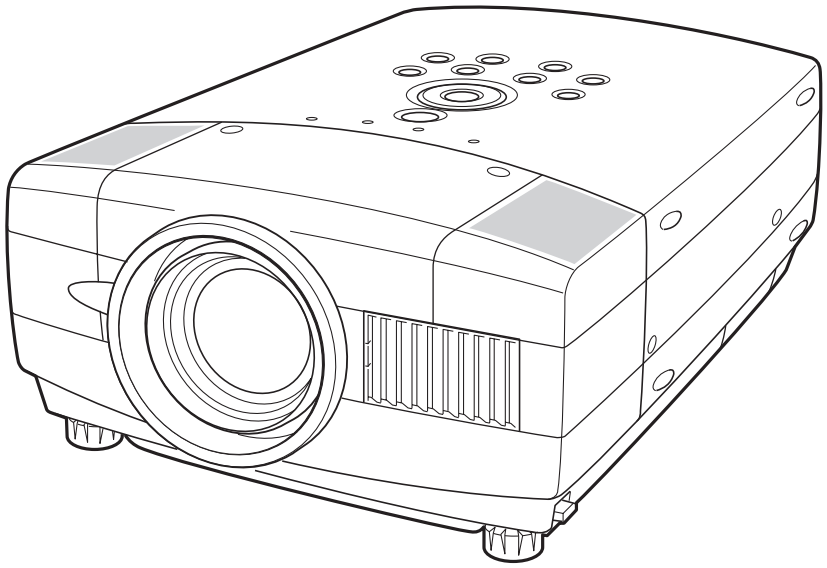
SERVICE MANUAL

Multimedia Projector

Model No. PLC-XT11
PLC-XT16

U.S.A., Canada,
Europe, Asia, Africa

Original Version



Chassis No. MJ7-XT1100
MH7-XT1600

NOTE: Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual.

If the Original Version Service Manual Chassis No. does not match the unit's, additional Service Literature is required. You must refer to "Notices" to the Original Service Manual prior to servicing the unit.

PRODUCT CODE

1 122 199 00 (MH7A) **1 122 201 00** (MJ7A)
1 122 200 00 (PH7A) **1 122 202 00** (PJ7A)
1 122 200 02 (PH7C) **1 122 202 02** (PJ7C)

REFERENCE NO. SM5110503-00

■ Contents

■ Safety Instructions 3
■ Specifications 4
■ Adjustments after Parts Replacement 5
■ Circuit Protections 6
Fuse 6
Thermal switch 6
Interlock switch 6
Warning temperature and power failure protection 7
■ Mechanical Disassemblies 8
■ Optical Parts Disassemblies 13
■ LCD Panel/Prism Ass'y Replacement 18
■ Lamp Replacement 19
■ Optical Adjustments 20
■ Electrical Adjustments 24
Service Adjustment Menu Operation 24
Circuit Adjustments 25
Test Points and Locations 30
Service Adjustment Data Table 31
■ Chassis Block Diagrams 39
Chassis over view 39
Inputs & video signal processing stage 40
LCD panel driving stage 41
Audio signal processing circuit 42
Motor driving circuit 43
System controls 44
Power supply & protection circuit 45
■ Troubleshooting 46
No Power 46
No Picture 47
No Sound 48
Lens Motor Problems 48
■ Control Port Functions 49
■ Waveform 54
■ Cleaning 56
■ IC Block Diagrams 57
■ Service Parts List 67-102
Electrical Parts List 67-96
Mechanical Parts List 97-102

Drawings & Diagrams

■ Parts description and reading in schematic diagram A2
■ Schematic diagrams A3-A10
■ Printed wiring board diagrams A11-A15
■ Pins description of ICs, transistors, diodes A16

SAFETY PRECAUTIONS

WARNING:
The chassis of this projector is isolated (COLD) from AC line by using the converter transformer. Primary side of the converter and lamp power supply unit circuit is connected to the AC line and it is hot, which hot circuit is identified with the line (⎓) in the schematic diagram. For continued product safety and protection of personnel injury, servicing should be made with qualified personnel.

The following precautions must be observed.

1: An isolation transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.

2: Comply with all caution and safety-related notes provided on the cabinet back, cabinet bottom, inside the cabinet or on the chassis.

3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, etc.

DO NOT OPERATE THIS PROJECTOR WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PROPERLY SECURED.

4: Before replacing the cabinet cover, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.

Before returning any projector to the customer, the service personnel must be sure it is completely safe to operate without danger of electric shock.

PRODUCT SAFETY NOTICE

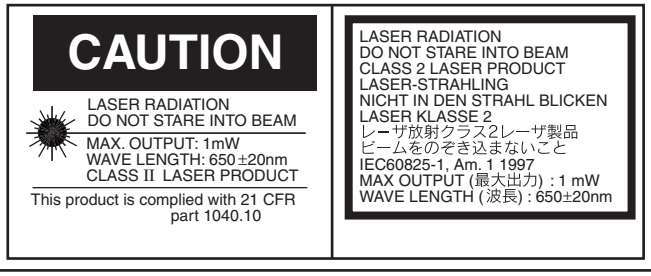
Product safety should be considered when a component replacement is made in any area of the projector. Components indicated by mark ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of there parts must be made by exactly the same parts.

SERVICE PERSONNEL WARNING

Eye damage may result from directly viewing the light produced by the Lamp used in this equipment. Always turn off Lamp before opening cover. The Ultraviolet radiation eye protection required during this servicing.
Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages(15kV - 25kV) at its starts.
Since the lamp is very high temperature during units operation replacement of the lamp should be done at least 45 minutes after the power has been turned off, to allow the lamp cool-off.

DO NOT ATTEMPT TO SERVICING THE REMOTE CONTROL UNIT.

Laser Beam may be leaked out when in disassemble the Unit. As the Laser Beam used in this Remote control unit is harmful to the eyes.



■ Specifications

Projector Type	Multi-media Projector
Dimensions (W x H x D)	11.9" x 6.4" x 16.6" (302mm x 162mm x 422mm) (not including Adjustable Feet)
Net Weight	17.2 lbs (7.8 kg)
LCD Panel System	0.99" TFT Active Matrix type, 3 panels
Panel Resolution	1024 x 768 dots
Number of Pixels	2,359,296 (1024 x 768 x 3 panels)
Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M and PAL-N
High Definition TV SIgnals	480i, 480p, 575i, 575p, 720p. 1035i and 1080i
Scanning Frequency	H-sync. 15 ~ 100kHz, V-sync. 50 ~ 100Hz
Projection Image Size (diagonal)	Adjustable from 31" to 300"
Horizontal Resolution	800 TV lines (HDTV)
Projection Lens	F 1.7 ~ 2.1 lens with f 34 mm ~ 44 mm with motor zoom and focus
Throw Distance	4.3' ~ 32.8' (1.3 m ~ 10.0 m)
Motorized Lens Shift	Up and Down
Projection Lamp	250 W
Computer 1 Input Terminal	(VGA) HDB 15-pin Terminal x 1
Computer 2 Input Terminal	DVI-I Terminal (Digital/Analog)
Computer Audio input jacks	Mini Jack (stereo) x 2 (Computer 1 and Computer 2)
Video Input Jacks	RCA Type x 1 (Video), RCA Type x 3 (Y, Pb/Cb, Pr/Cr),Mini DIN 4 pin x 1 (S-Video) and RCA x 2 (Audio R and L)
Monitor Output Terminals	(VGA) HDB 15-pin Terminal x 1
Audio Output Jacks	Mini Jack (stereo) x 1
Control Port Connector	Mini DIN 8 pin x 1
USB Connector	USB Series B receptacle x 1
Built-in Speakers	INT. SP. Stereo (R and L), 2 watt RMS (T.H.D. 10%)
Feet Adjustment	0˚ to 10˚
Voltage and Power Consumption	AC 100 ~ 120V (4.6A Max. Ampere), 50/60Hz (The U.S.A and Canada) AC 200 ~ 240V (2.3A Max. Ampere), 50/60Hz (Continental Europe and the U.K)
Operating Temperature	41 ˚F ~ 95 ˚F (5˚C ~ 35˚C)
Storage Temperature	14 ˚F ~ 140 ˚F (-10˚C ~ 60˚C)
Remote Control Transmitters	Power Source : AA, UM3 or R06 Type x 2 Operating Range : 16.4' (5m) / ±30˚ Dimensions : 2.0" x 1.4" x 7.6" (50mm x 36mm x 193mm) Net Weight : 0.35 lbs (160 g) (including batteries) Laser Pointer : Class II Laser (Max. Output : 1mW / Wave length : 650±20nm)

● The specifications are subject to change without notice.

c UL US LISTED

This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

■ Adjustments after Parts Replacement

● : Adjustment necessary ❍ : Check necessary

		Disassembly / Replaced Parts								
		LCD/ Prism Ass'y	Condenser Lens	Relay Lens	Mirror	Polarized glass			Power DC Board	Main Board
						R	G	B		
Optical Adjustments	Condenser lens adjustment	❍	●							
	Relay lens adjustment	❍		●						
	Mirror adjustment				●					
	Contrast Adjustment									
	R-Contrast adjustment					●				
	G-Contrast adjustment						●			
	B-Contrast adjustment							●		
Electrical Adjustments	Fan voltage adjustment								●	
	Video center adjustment									●
	NRS adjustment									●
	Pedestal adjustment [PC]									●
	Video gain adjustment [PC]									●
	Black level adjustment [PC]									●
	Luminance adjustment [PC]									●
	A/D ref. voltage adjustment [Video]									●
	A/D input adjustment [Video]									●
	Pedestal adjustment [Video]									●
	Video gain adjustment [Video]									●
	A/D input adjustment [Component]									●
	Pedestal adjustment [Component]									●
	Video gain adjustment [Component]									●
	Luminance adjustment [Video]									●
	Common center adjustment	●								●
	White balance adjustment	❍								❍

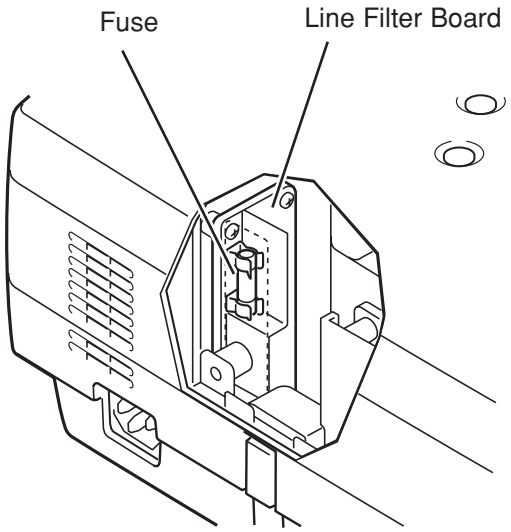
■ Circuit Protections

This projector provides the following circuit protections to operate in safety. If the abnormality occurs inside the projector, it will automatically turn off by operating one of the following protection circuits.

● Fuse

The fuse is located inside of the projector. When either the LAMP indicator or the READY indicator is not illuminated, fuse may be opened. Check the fuse as following steps.
It should be used the specified fuse as follows;

FUSE PART NO. : 645 058 8181
TYPE 8A 250V FUSE
SKYGATE CO. LTD. TYPE SG-5013 008

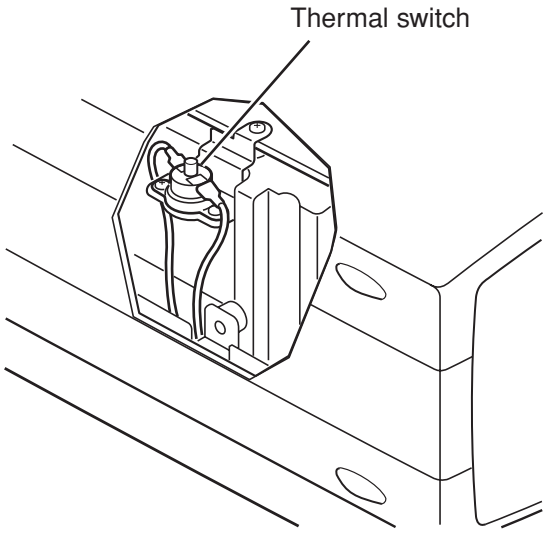


How to replace the fuse

1. Remove the cabinet top following to “Mechanical Disassemblies”.
2. Remove the fuse from fuse holder.
To install the fuse, take reversed step in the above.

● Thermal switch

There is the thermal switch (SW905) inside of the projector to prevent the internal temperature rising abnormally. When the internal temperature reaches near 90˚C, turn off the AC main power supply automatically.
The thermal switch is not reset to normal automatically even if the internal temperature becomes normal. Reset the thermal switch following procedure.
Check the resistance between terminals of thermal switch by using the tester. If it has high impedance, thermal switch may be in operative.



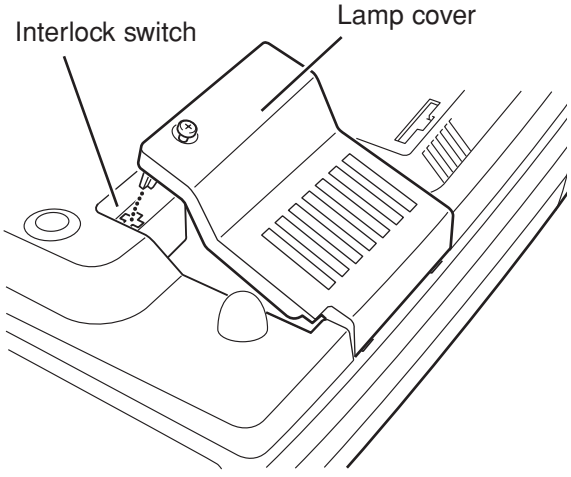
How to reset the thermal switch

1. Remove cabinet top following to the “Mechanical Disassemblies”.
2. Press the reset button on the thermal switch.

CAUTION:
Before press the reset button, make sure that the AC cord must be disconnected from the AC outlet.

● Interlock switch

The interlock switch (SW902) cuts off the AC mains power supply when the lamp cover is removed. After opening the lamp cover for replacing the lamp ass’y, place the lamp cover correctly otherwise the projector can not turn on.



● Warning temperature and power failure protection

The projector will be automatically turned off when the internal temperature of the projector exceeds the normal operating temperature, or the cooling fans stops, or the power supplies in the projector are failed.

- If the TEMP WARNING indicator (red) is flashing, it may detect the abnormal temperature inside the projector. Check the following possible causes and wait until the WARNING TEMP indicator flashing stops, and then try to turn on the projector.
- If both of the TEMP WARNING (red) and READY (green) indicators are flashing at the same time, It may defect the cooling fans and power supply circuits. Check fan operation and power supply lines referring to the chapter “Power supply & protection circuit” in the Chassis Block Diagram section.

Possible causes

- Air filter is clogged with dust particles. Remove dust from the air filter by following instructions in the “Air filter care and cleaning” below.
- Ventilation slots of the projector are blocked. In such an event, reposition the projector so that ventilation slots are not obstructed.
- Check if projector is used at higher temperature place (Normal operating temperature is 5 to 35 ˚C or 41 to 95˚F)

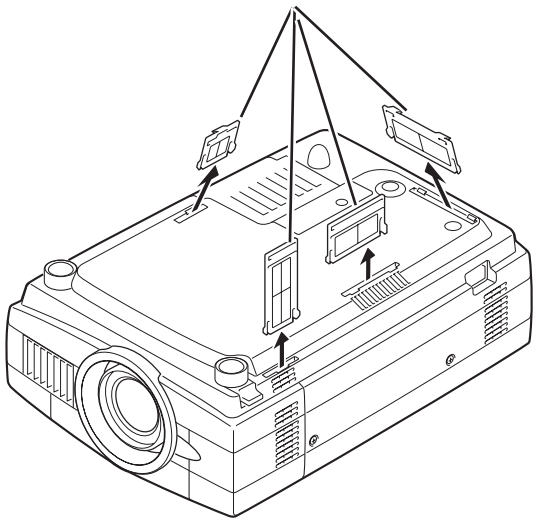
Air filter care and cleaning

The removable air filters prevent dust from accumulation on the surface of the projection lens and projection mirror. Should the air filter become clogged with dust particles, it will reduce the cooling fan’s effectiveness and may result in internal heat build up and reduce the life of the projector.

To clean up the air filters, follow the cleaning procedure below:

1. Turn the power off, and disconnect the AC power cord from the AC outlet.
2. Turn the projector up side down and remove air filters by pulling the latches of them upward.
3. Clean the air filters with brush or wash out the dust and particles.
4. Replace each air filter properly. Make sure that the air filters are fully inserted.

Air filters



CAUTION:

Do not operate the projector with the air filter removed. The dust is stuck on the LCD panel and the mirror, and it may spoil the fine picture image.
Do not put the small parts into the air intake vents. It may result in the malfunction of the projector. The air filters are small parts. Take care that children don’t eat or swallow it.

RECOMMENDATION

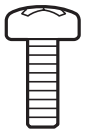
We recommend not to use the projector in dusty, smoky places. Using it in dusty place may cause the poor picture quiality.
When using under the dusty or smoky conditions, dust may accumulate on the LCD panel and lens inside it, and may resultantly be projected on the screen together with the picture.
When the above symptoms are noticed, please clean up the LCD panel and lens following to the “Cleaning Method”.

■ Mechanical Disassemblies

Mechanical disassemble should be made following procedures in numerical order.
Following steps show the basic procedures, therefore unnecessary step may be ignored.
Caution:
The parts and screws should be placed exactly the same position as the original otherwise it may cause loss of performance and product safety.

1 Cabinet Top removal

1 Turn the Lens Front Cover counter-clockwise and take it off by pulling forward as shown in **Fig.1-1.**
2 Remove 2 screws **A** (M4x10) to take the Cabinet Front-Top off.
3 Remove 5 screws **B** (M4x10) and then take the Cabinet Top upward off.

Screws Expression (Type Diameter x Length) mm	
T type	M Type
	

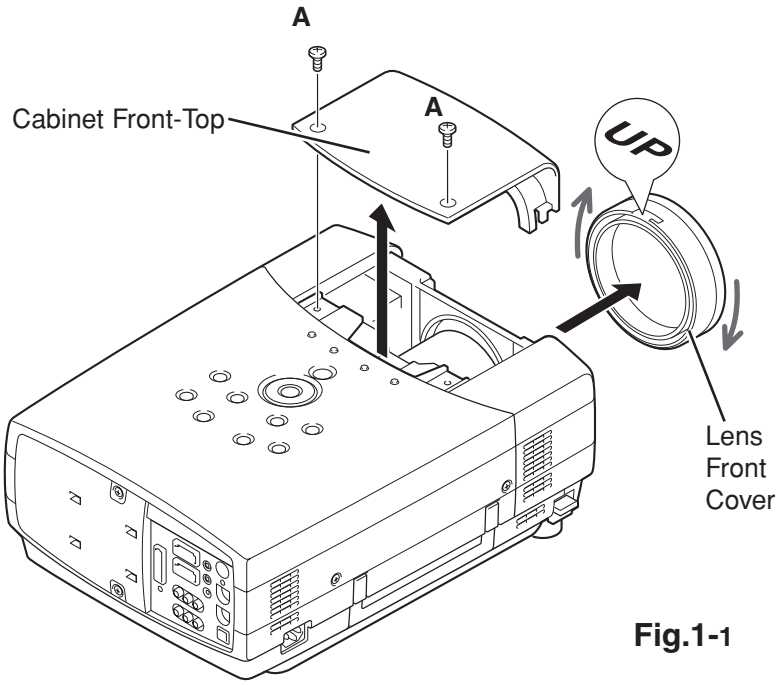


Fig.1-1

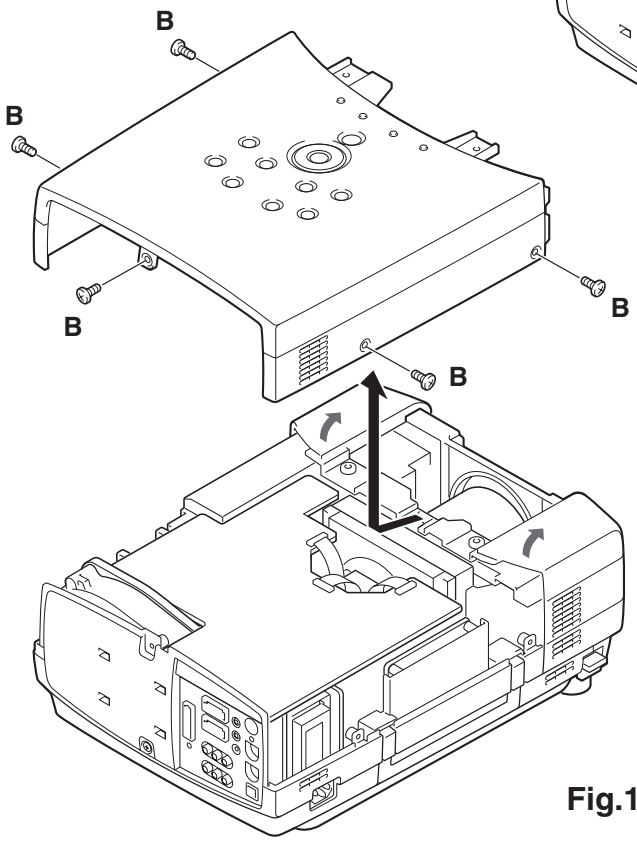


Fig.1-2

2 Main Board & Thermal-SW removal

1 Remove 1 screw **A** (M3x8) to take the thermal switch(SW905).
2 Remove 5 screws **B** (M3x6) to take the Main Board upward.

3 AV, COM Board & Rear Panel removal

1 Remove 1 screw **C** (M4x10) and take the Rear Panel ass'y upward off.
2 Remove 4 screws **D** (T3x6) to take the AV Board from the Rear Panel ass'y off.
3 Remove 5 screws **E** (T3x6) to take the COM Board from the Rear Panel ass'y off.

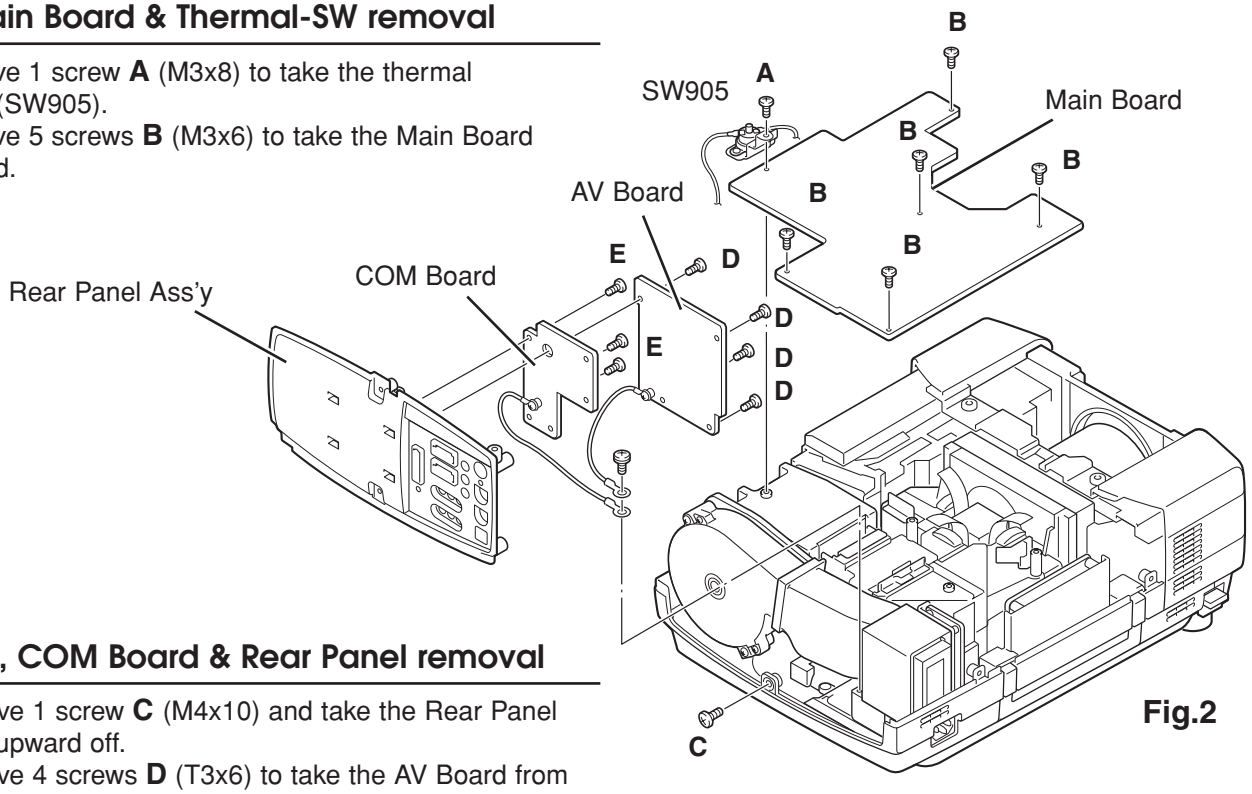


Fig.2

4 Cabinet Front removal

1 Remove the Lens Cover upward off.
2 Remove 2 screws **A** (M4x10) and take the Cabinet Front off.
3 Remove 1 screw **B** (T3x10) and take the R/C Board off.
4 Remove 3 screws **C** (T3x8) and take the Filter Holder off.

5 Audio Board removal

1 Remove 3 screws **D** (T3x10) and pull the Holder ass'y upward off.
2 Remove 4 screws **E** (T3x8) to take the Audio Board from the Holder.

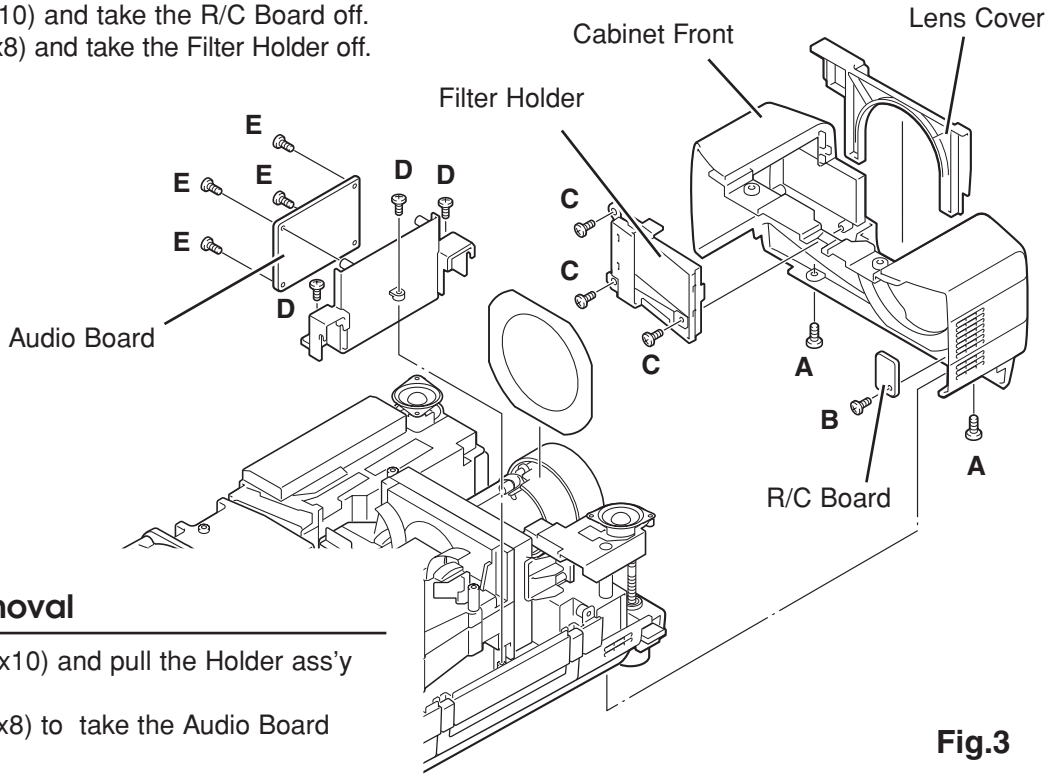


Fig.3

6 Speaker base removal

1 Remove 3 screws **A** (T3x10) and then remove the Speaker Base.

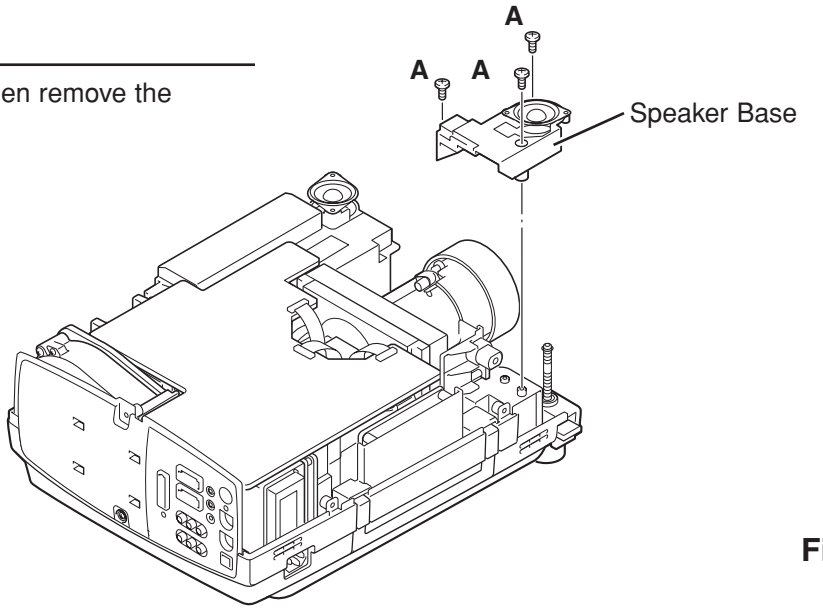


Fig.4

7 Optical Unit removal

1 Loosen 1 screw **A** on the lamp cover and 2 screws **B** on the lamp house and the take the Lamp House off from the cabinet bottom.
2 Remove 2 screws **C** (M3x8) and disconnect the lamp socket.
3 Remove 2 screws **D** (M3x8) and remove sheild plate.
4 Remove 5 screws **E** (T4x10) on the optical unit, 1 screw **F** (T3x8) on the duct ass'y and then pull the Optical Unit upward off.

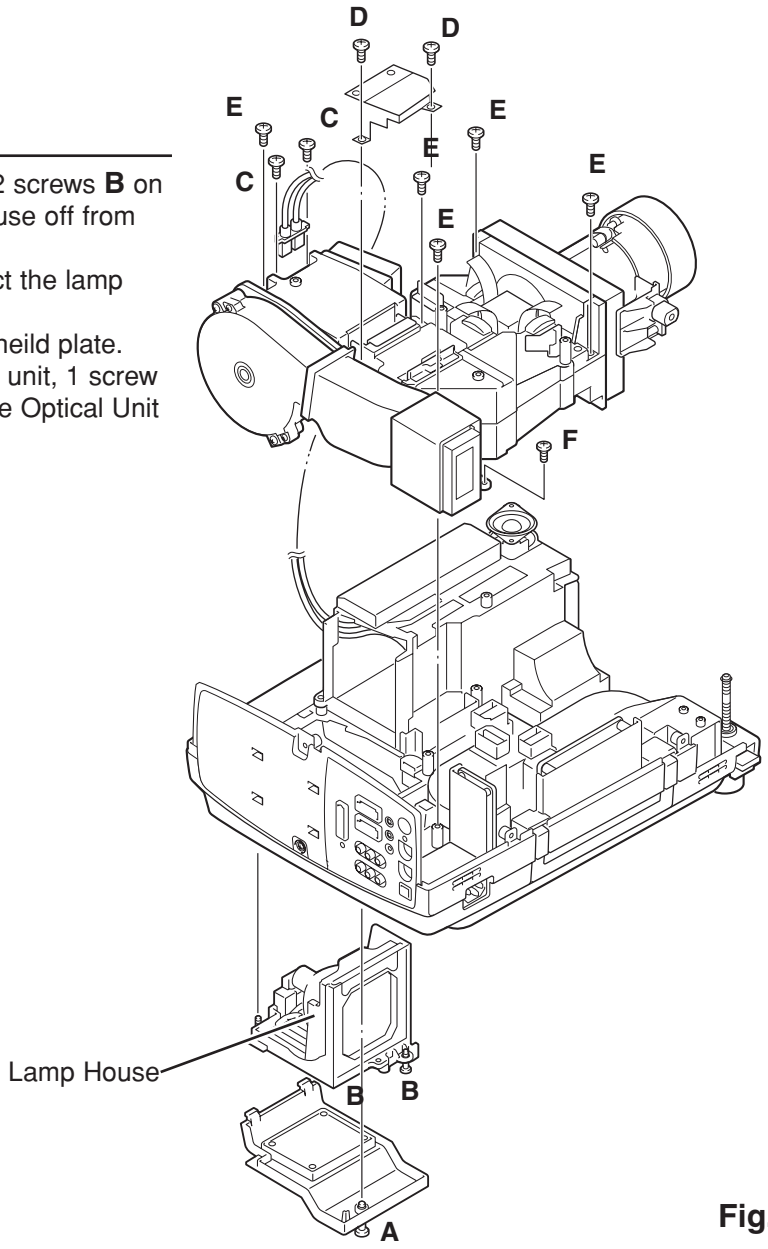


Fig.5

8 Fan & Motor removal

1 Remove 4 screws **A** (T3x20) to take the fan (FN904) off.
2 Remove 3 screws **B** (T4x25) to take the fan (FN907) off.
3 Remove 4 screws **C** (T3x10) to take the duct ass'y off.
4 Remove 2 screws **D** (T3x6) to take the Lens Shift Motor and Sensor SW Holder from the Base.

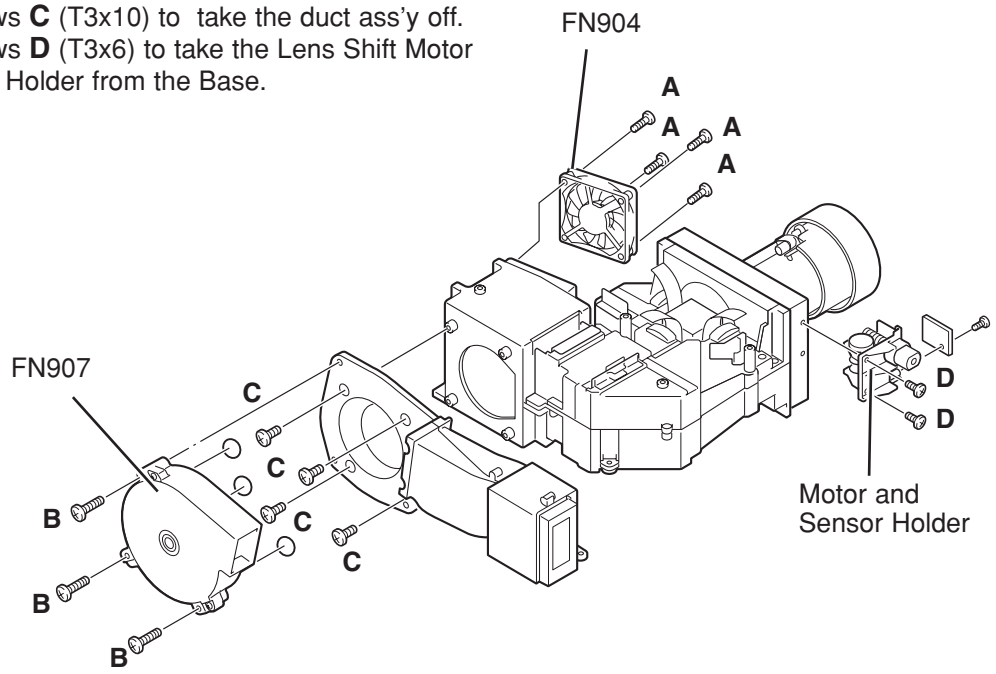


Fig.6

9 Lamp Ballast Board removal

1 Remove 4 screws **A** (T3x8) and then pull the Ballast Board Ass'y upward off.
2 Remove 3 screws **B** (T3x20) to take the Fan (FN905) off.
3 Unhook 4 hooks and take the Lamp Ballast Board off.
4 Disconnect the Power DC board from the Power AC board.

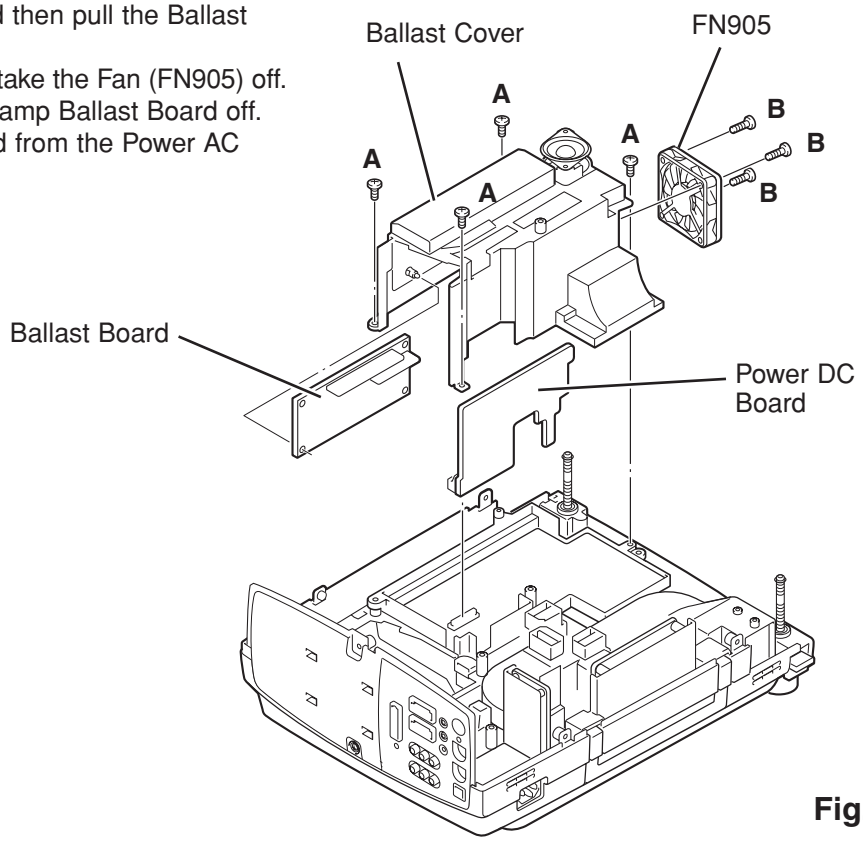


Fig.7

10 Power AC Board removal

1 Remove 4 screws **A** (T3x6) to take the Power Board off.
2 Remove 4 screws **B** (T3x10) to take the Holder from the cabinet bottom.

11 Line Filter Board & Interlock SW removal

1 Remove 3 screws **C** (T3x10) to take the Filter Board Ass'y upward.
2 Remove 3 screws **D** (T3x8) and 1 screw **E** (T3x6) to take the Filter Board from the Holder.
3 Remove 2 screws **F** (T3x10) to take the Interlock switch (SW902) from the cabinet bottom.

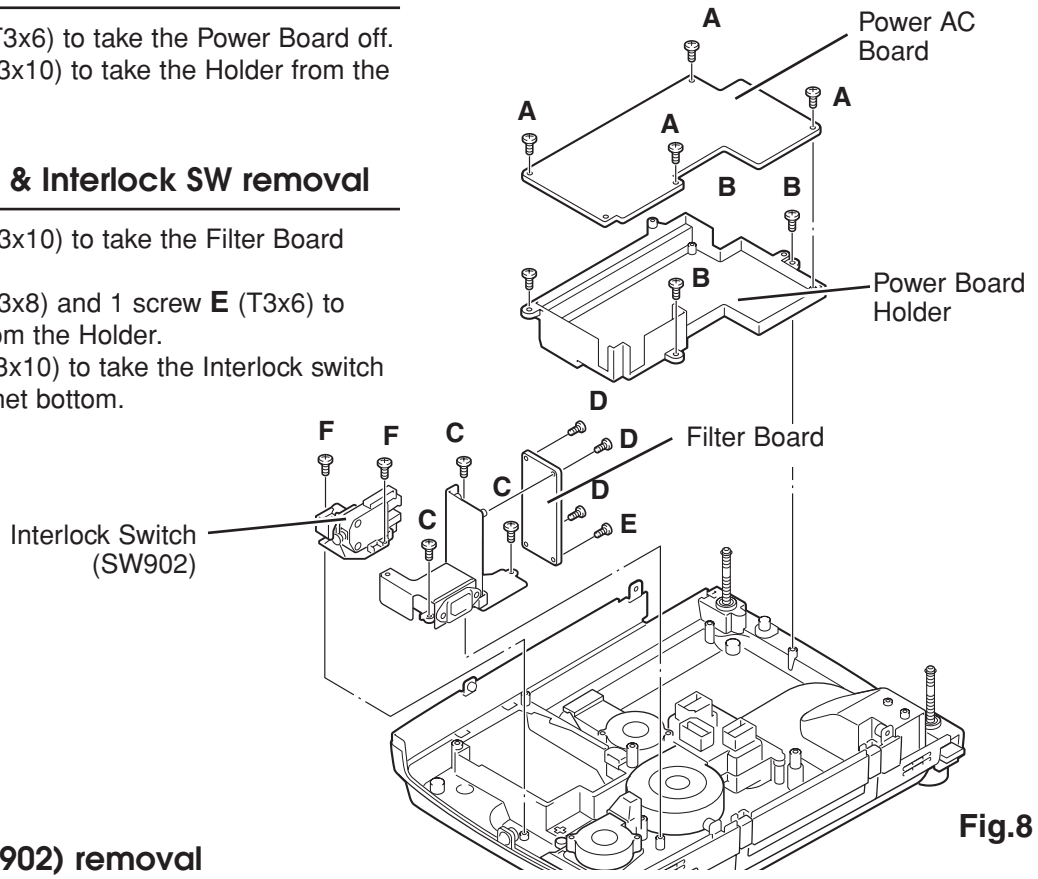


Fig.8

12 Fans (FN901, FN902) removal

1 Remove 1 screw **A** (T3x20) then take the Fan (FN906) off and remove 3 screws **B** (T3x10) to take the Duct-A off.
2 Remove 4 screws **C** (T3x10) to take the Duct-B off.
3 Remove 3 screws **D** (T3x10) to take the Duct-C off, remove 1 screw **E** (T3x8) and take the Sensor Board off.
4 Remove 2 screws **G** (T4x25) to take the Fan (FN902) off. Remove 2 screws **H** (T4x25) to take the Fan (FN901) off.
5 Remove 2 screws **J** (T3x8) to take the Duct Cover off and remove 2 screws **K** (T4x25) to take the Fan (FN903) off.
6 Remove 5 screws **L** (T3x10) to take the Duct-D off.

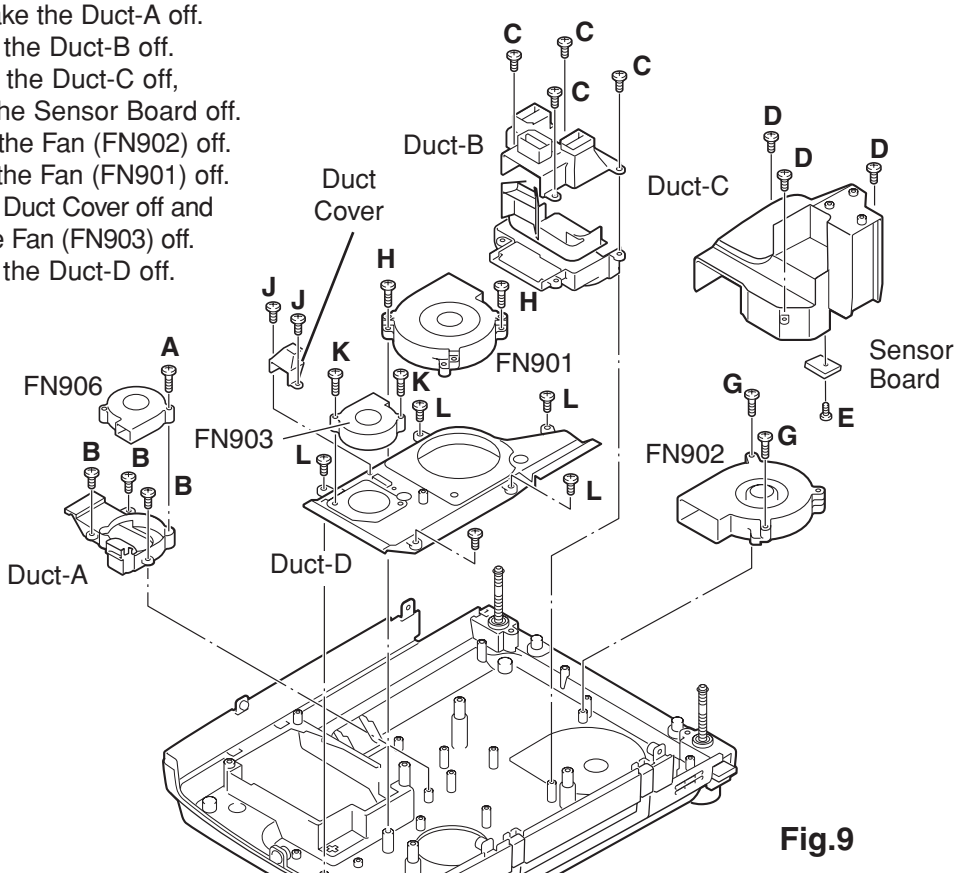


Fig.9

■ Optical Parts Disassemblies

Before taking this procedure, remove Cabinet Top and Main Board following to the “Mechanical Disassemblies”. Disassembly requires a 2.0mm hex wrench.

1 Projection Lens removal

1 Shift the projection lens to the end of top position by pressing the Lens Shift (+) button.
2 Remove the Cabinet Front-Top and Lens Holder following to the chapter “Mechanical Disassemblies”.
3 Press and hold the Fixing Lever **A** and turn the Projection Lens counter-clockwise(1/6 turn) and then take it off.

Note in the Mounting Projection Lens
Insert the Projection lens into the guide at a position where the both markers on the projection lens and the mounting base come together, and turn it clockwise until the Fixing Lever is set to the fixing position.

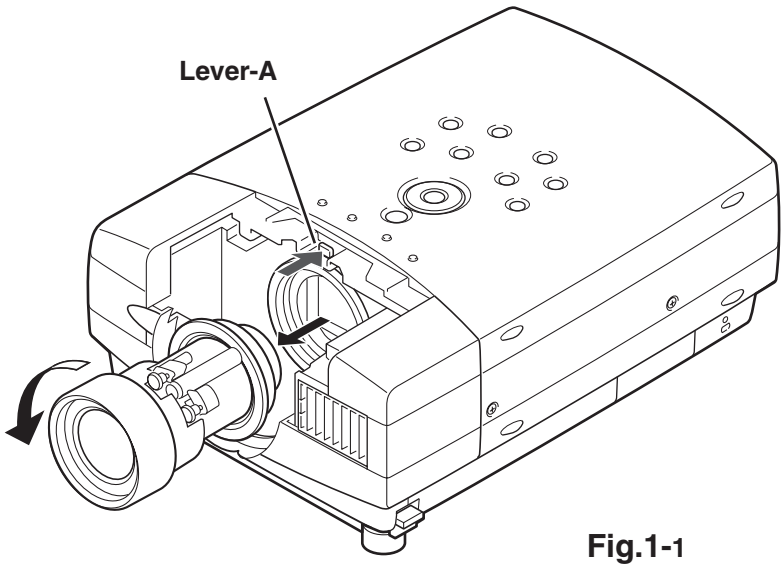


Fig.1-1

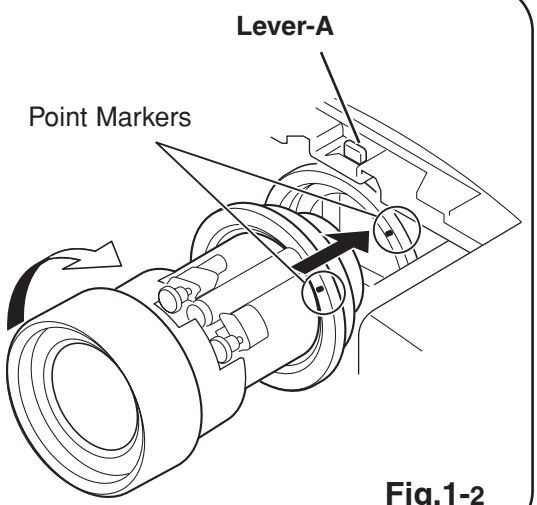


Fig.1-2

2 Polarized Glass-In removal

1 Remove each hex screw and pull the Polarized Glass-In ass’y upward.
2 Remove a stopper and take the glass off upward.

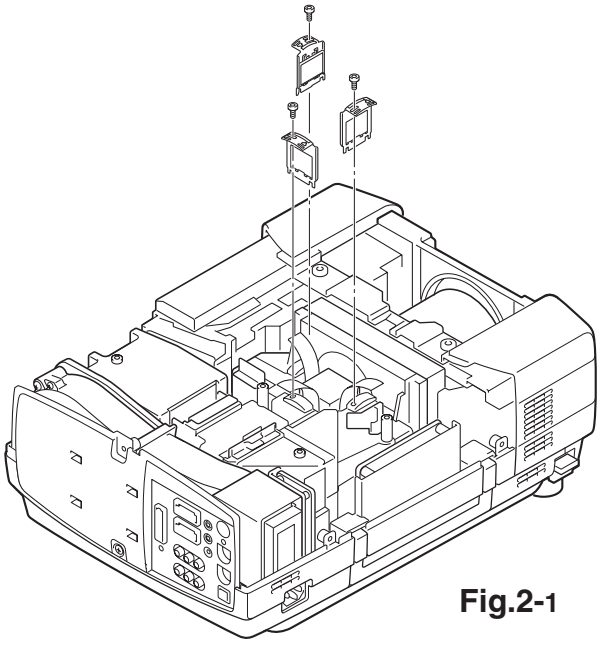
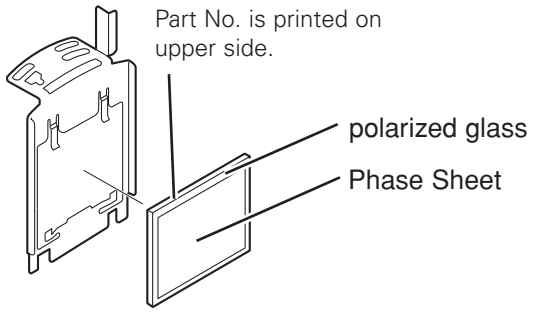


Fig.2-1



* Glass should be placed as the printed marker comes to the upper left corner.

Fig.2-2

3-1 Prism ass'y removal and disassembly

1 Remove 4 hex screws **A** and take the LCD/Prism ass'y off upward.
2 Remove each 1 screw **B** and take the Glass Holder, and then pull the Optical filter, Polarized Glass-Out upwards off. These glasses are mounted for R, G and B LCD panels respectively.

Note:
To avoid the CG and focus alignments slipping off, please be careful to handle the LCD/Prism ass'y.

Note:
Do not replace the LCD panel separately otherwise it can not obtain proper picture.

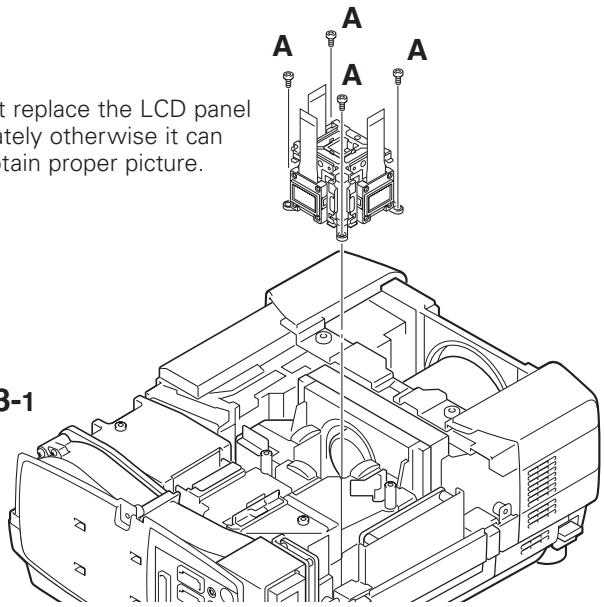
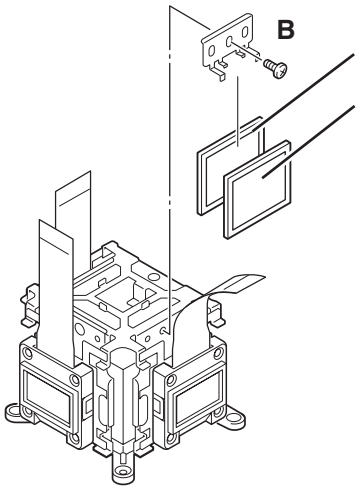


Fig.3-1



* Glasses should be placed as the sheet attached side comes to the LCD panel side.

Fig.3-2

3-2 Polarized glass and optical filter mounting direction

The polarized glasses and optical filters in the prism assembly are installed as figure below. Please be careful for the mounting.
The polarized glasses are placed as the film attached face comes outside. The optical filters are placed as the face on which the part no. is printed comes to the arrow direction as shown in the figure. The optical filters for B and G panel have films on the both of the faces.

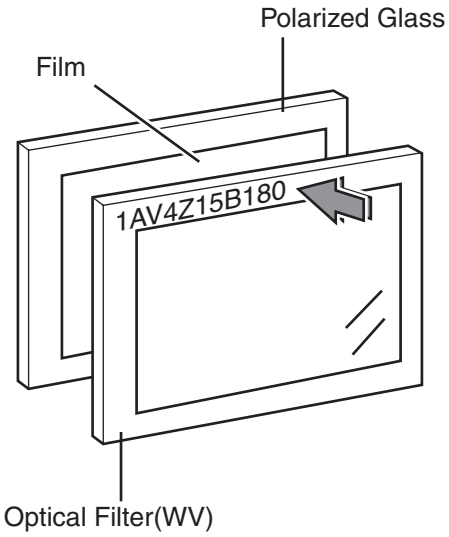


Fig.3-4

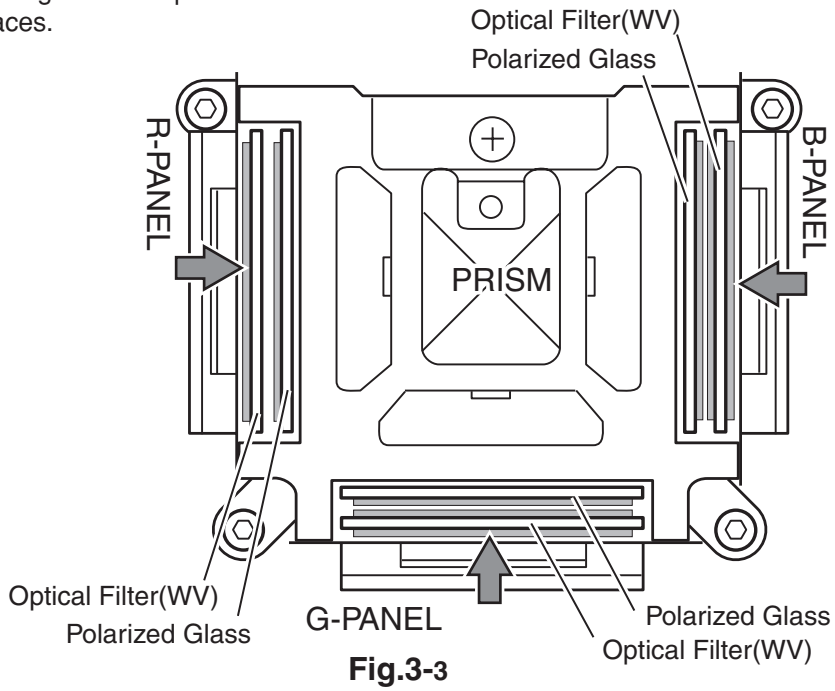


Fig.3-3

4 Relay Lens disassembly

1 Remove 2 hex screws **A** and pull the Relay Lens ass'y upward.
2 Remove 2 screws **B** to take the Lens off from the holder.
Note:
There is no mounting direction of the lens.

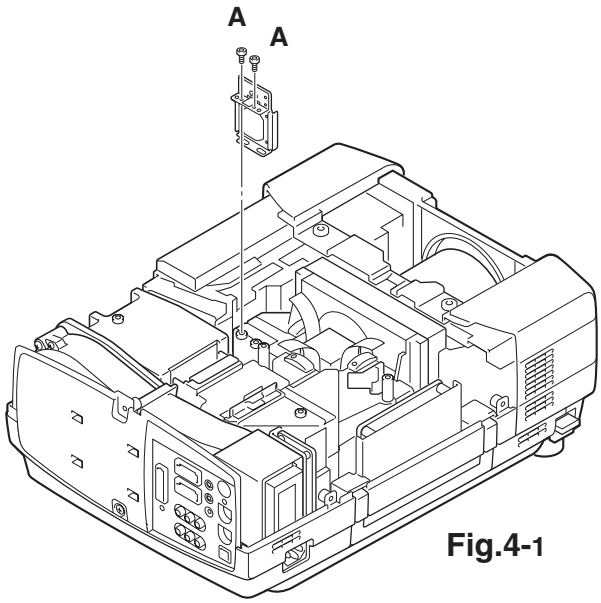


Fig.4-1

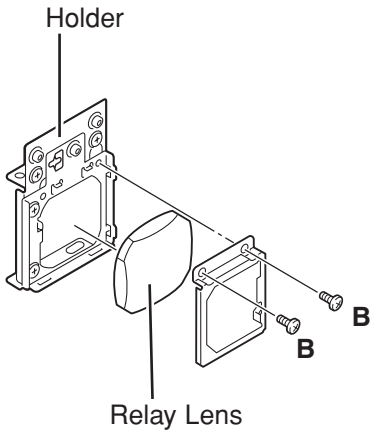


Fig.4-2

5 Integrator-In disassembly

1 Remove 2 hex screws **A** and take the Integrator Lens ass'y.
2 Remove 2 screws **B** to take the Lens off from the holder.

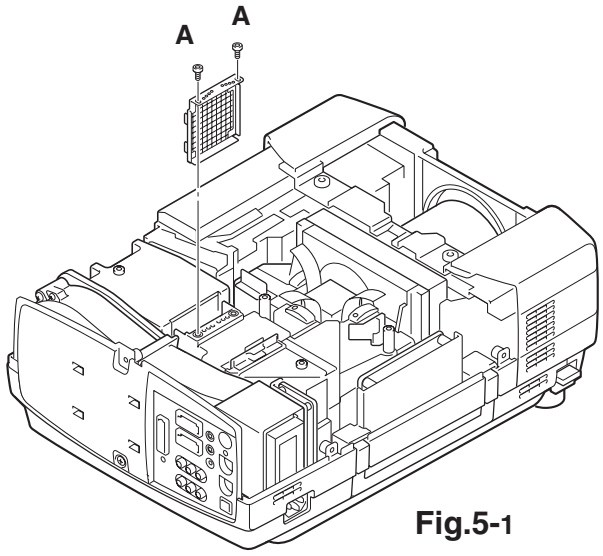


Fig.5-1

* Lens should be placed as the flat surface side comes to the holder side.

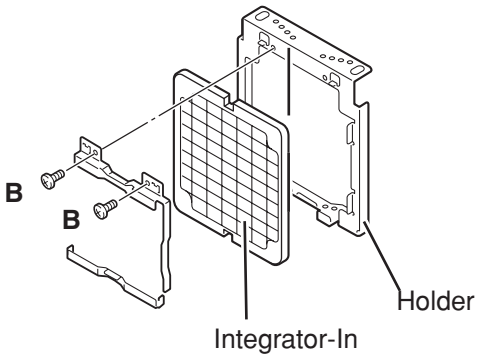


Fig.5-2

6 Condenser Lens disassembly

1 Remove 2 hex screws **A** and take the Condenser Lens ass'y.
2 Remove 4 screws **B** to take the Lens off from the holder.

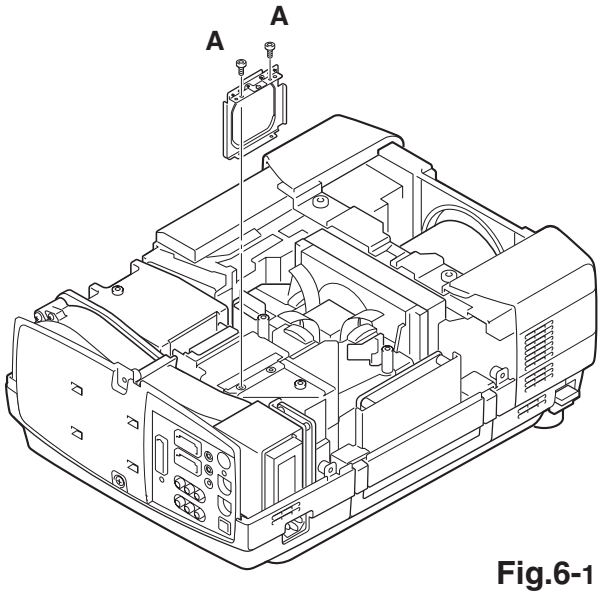


Fig.6-1

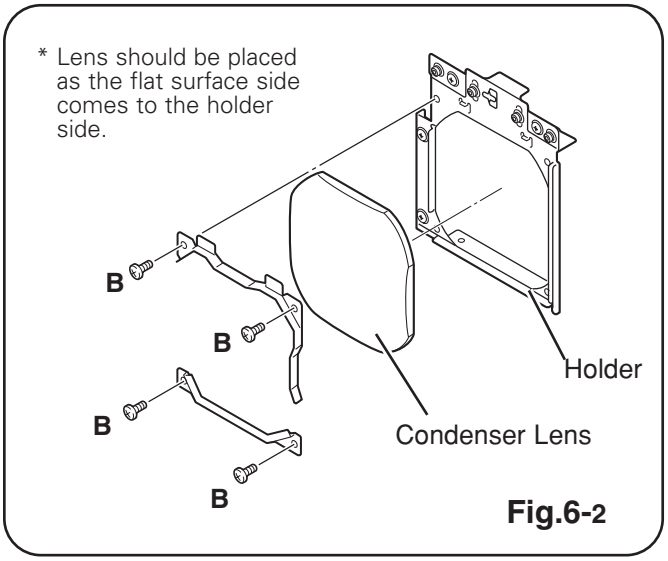


Fig.6-2

7 Optical Unit Top removal

1 Loosen 2 screws **A** on the holder on the optical unit.
2 Remove 7 screws **B** to take the Optical Unit Top off upward.

Note in Mounting of the Optical Unit Top
After mounting the Optical Unit Top, mount the holder for fixing the Mirror in the optical unit.

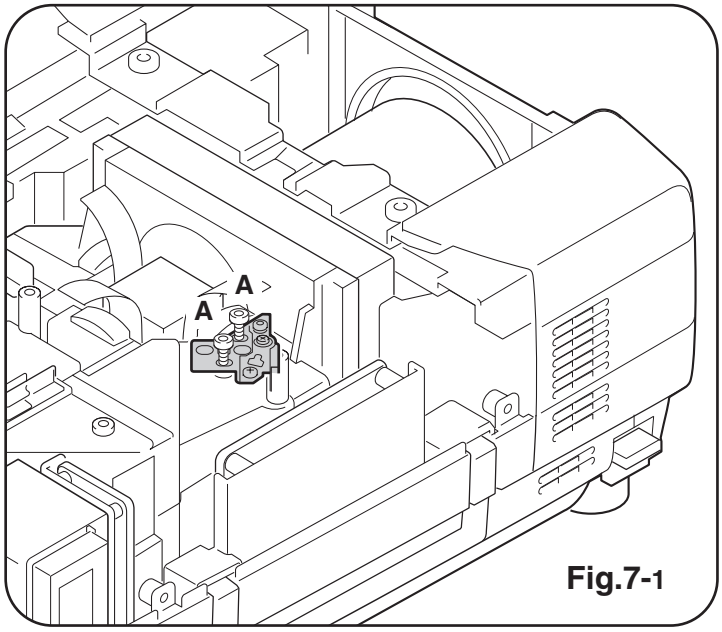


Fig.7-1

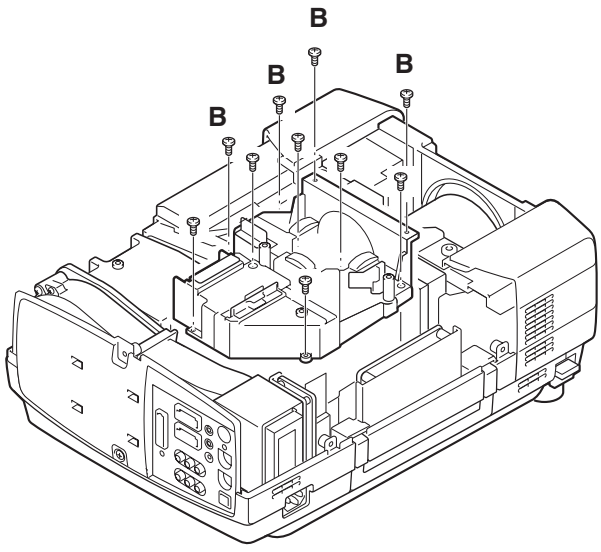


Fig.7-2

Locations and Directions

When the optical parts in the optical unit mounting or assembling, the parts must be mounted in the specified location and direction as shown in figure below.

Note: The arrow in the figure below is indicated that there is the direction of part placement. Place each part as the printed marker on the part comes to each arrow direction.

The key No. 16 should be placed as the film attached side comes to the mirror side.

Key No.	Description
1	Slit-Int
2	Integrator Lens-Out
3	PBS (Prism Beam Splitter)
4	Mirror (W-Cold)
5	Condenser lens-Out
6	Dichroic mirror (B)
7	Optical Filter (UV Cut)
8	Mirror Holder
9	Mirror (B)
10	Condenser lens
11	Dichroic Mirror (G)
12	Condenser Lens (G)
13	Relay lens-In
14	Mirror (R)
15	Condenser Lens (R)
16	Pre-polarized glass (B)

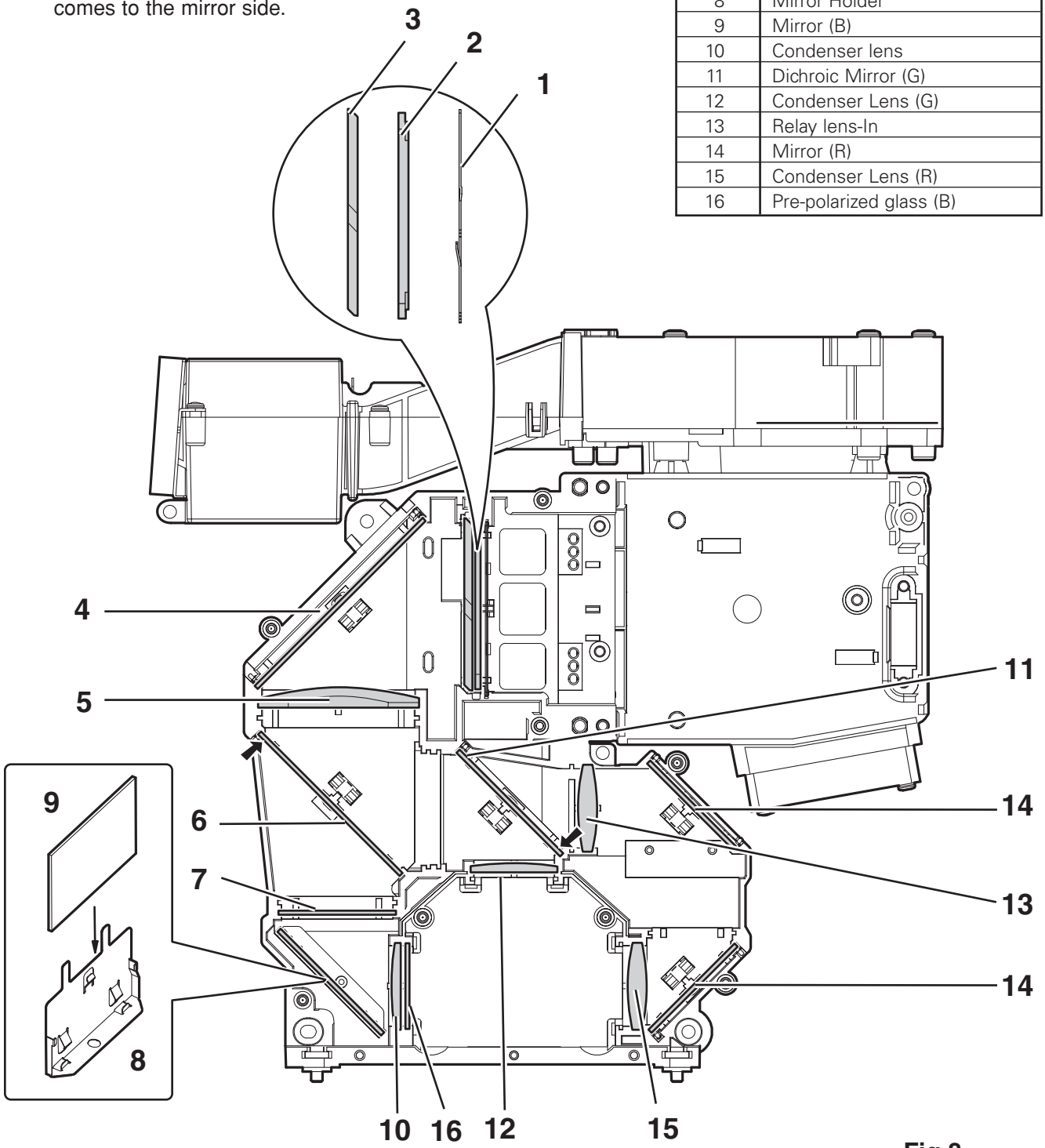


Fig.8

■ LCD Panel/Prism Ass'y Replacement

IMPORTANT NOTICE on LCD Panel/Prism Ass'y Replacement

LCD panels used for this model can not be replaced separately. Do not disassemble the LCD Panel/Prism Ass'y. These LCD panels are installed with precision at the factory. When replacing the LCD panel, should be replaced whole of the LCD panels and prism ass'y at once.

After replacing LCD Panel/Prism ass'y, please check the following points.

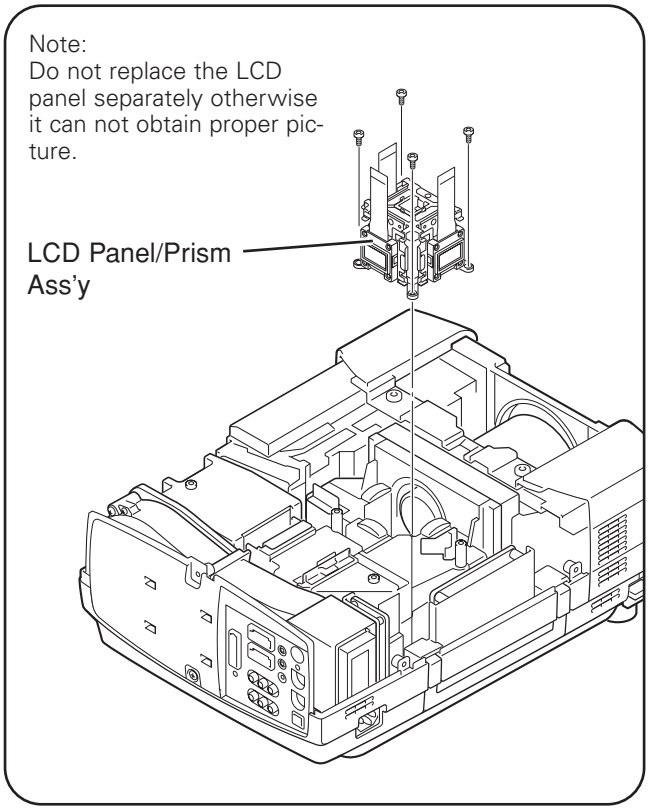
- Check that there is no color shading at the top, bottom, left or right of the screen. If there is, try to remove the shading following to the chapter "Optical Adjustment".
- Check the white balance. If it needs the adjustment, adjust the white balance following to the "White Balance Adjustment" and "Common Centre Adjustment" in the chapter "Electrical Adjustment".
- Check the white uniformity on the screen.
  If you find the color shading at the some part of the screen, it needs to take the color shading adjustment. This adjustment should be performed by a computer and it also requires a special software "Color Shading Correction". The software will be supplied separately and can be ordered as follows;

COLOR SHADING CORRECTION SOFTWARE
Service Parts No. 645 051 2308

LCD Panel/Prism Ass'y removal

1 Remove the cabinet top and main board following to "Mechanical Disassemblies".
2 Remove 3 Polarized Glass-In.
3 Remove 4 screws by using the 2.0 mm hex driver and take the LCD Panel/Prism ass'y off upward from the optical unit.

Note:
Do not replace the LCD panel separately otherwise it can not obtain proper picture.

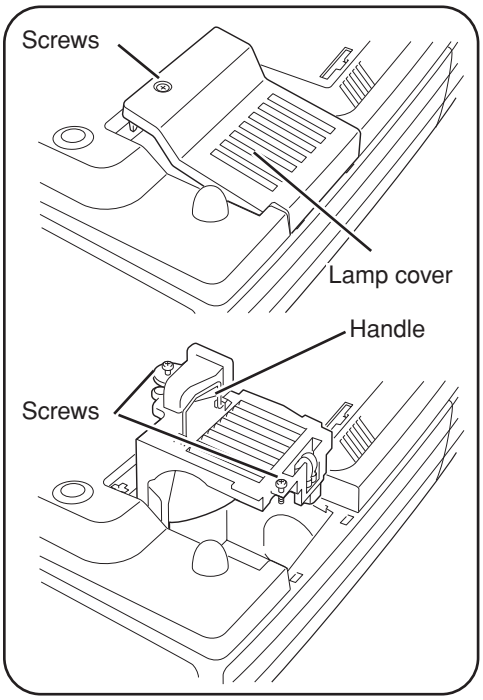


■ Lamp Replacement

WARNING:
- For continued safety, replace with a lamp assembly of the same type.
- Allow the projector to cool for at least 45 minutes before you open the lamp cover. The inside of the projector can become very hot.
- Do not drop the lamp module or touch the glass bulb! The glass can shatter and cause injury.

ORDER REPLACEMENT LAMP

Type No.	Service Parts No.
POA-LMP59	610 305 5602



Procedure

1 Turn off the projector and disconnect the AC cord. Allow the projector to cool for at least 45 minutes.
2 Loosen 1 screws with a screwdriver and open the lamp cover.
3 Loosen 2 screws and pull out the lamp assembly by grasping the handle.
4 Replace the lamp assembly securely and tighten 2 screws.
5 Close the lamp cover and tighten 1 screw.
6 Connect the AC cord to the projector and turn on.

7 Reset the Lamp Replace Counter, see below explanation.

Note:
- Do not reset the Lamp Replace Counter, except after lamp is replaced.
- The projector can not be turned-on with lamp cover removed, because when the lamp cover is removed, the interlock switch is also released to switch off the mains power for safety.

How to reset Lamp Replace Counter

1 Turn the projector on, and press the **MENU** button and the on-screen menu will appear. Press the ◀ or ▶ button to move a red frame pointer to SETTING menu icon.
2 Press the ▲ button to move a red frame pointer to "Lamp counter reset" and then press the **SELECT** button. The message "Lamp replace counter reset?" is displayed. Move the pointer to [Yes] and the press the **SELECT** button.
3 Another confirmation dialog box appears and select [Yes] to reset Lamp Replace Counter .

Please refer to the owners manual for further information.

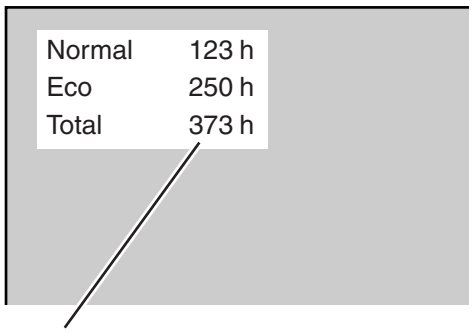
Recommendation

Should the air filter become clogged with dust particles, it will reduce the cooling fan's effectiveness and may result in internal heat build up and short lamp life. We recommend cleaning the air filter after the projection lamp is replaced.
Refer to "Air Filter Cleaning".

How to check Lamp Replace Counter

The LAMP REPLACEMENT indicator will illuminate when the Lamp Replace Counter reaches 1000 hours. This is to indicate that lamp replacement is required.

You can check the lamp replace counter following to below procedure.
1 Press and hold the pointer ▲ on the projector for more than 20 seconds.
2 The Lamp replace Counter is displayed on top left corner of the screen briefly.



Lamp replace counter data

■ Optical Adjustments

Before taking optical adjustments below, remove the Cabinet Top and Main Board, if required, following to the "Mechanical Disassemblies"
Adjustments require a 2.0mm hex wrench and a slot screwdriver.
Note: Do not disconnect connectors K8E, K8F, K8G, K8J and K8K on the main board, because the projector can not turn on due to operate the power failure protection.

Contrast adjustment

[Before Adjustment]
- Input a 100% of black raster signal.

[R/G/B-CONTRAST ADJUSTMENT]

1 Loosen a screw **A** (**Fig.1-1/1-2**) on the polarized glass mounting base which you intend to adjust.
2 Turn the polarized glass mounting base as shown in **Fig.1-1** to obtain the darkest brightness on the screen.
3 Tighten the screw **A** to fix the polarized glass mounting base.

Repeat steps 1 to 3 for remaining polarized glasses.

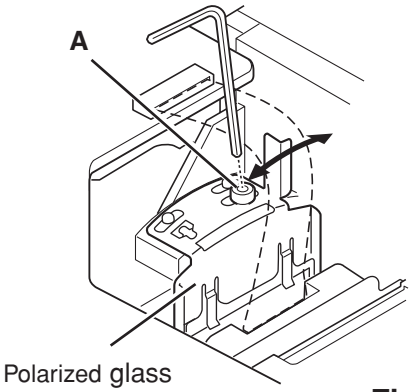


Fig.1-1

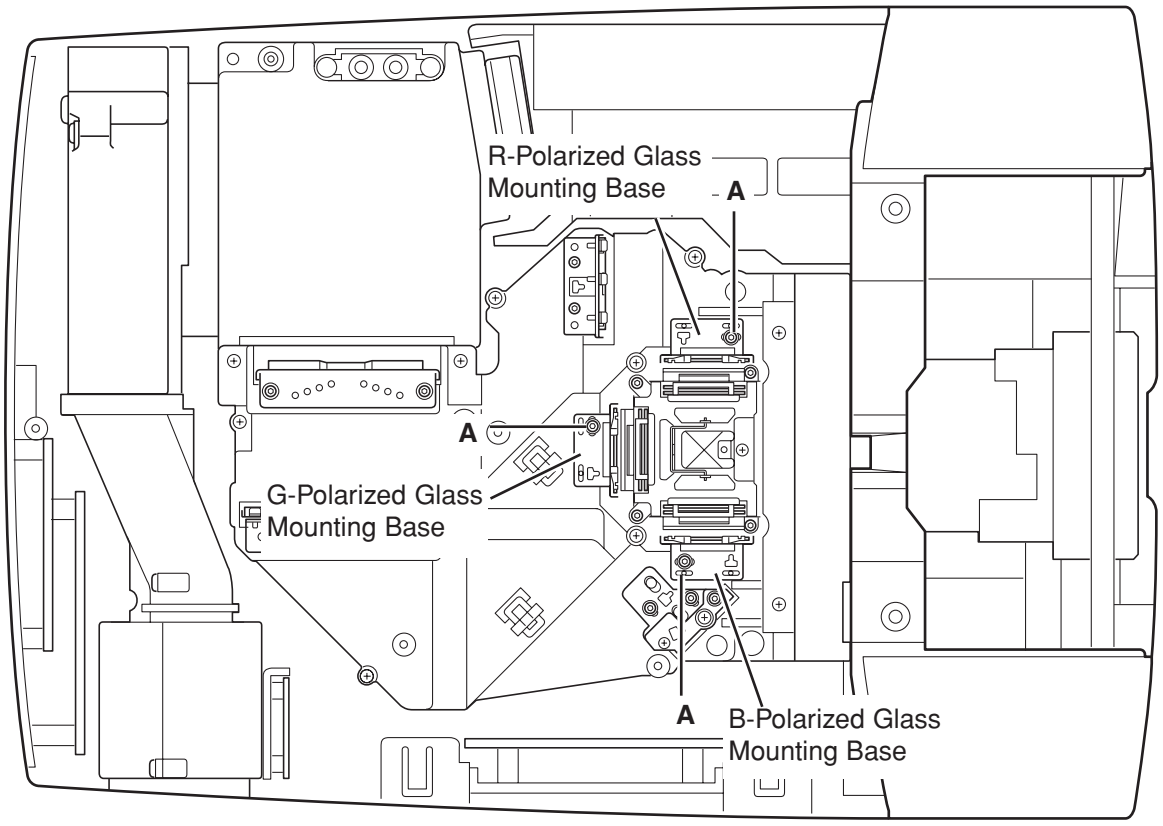
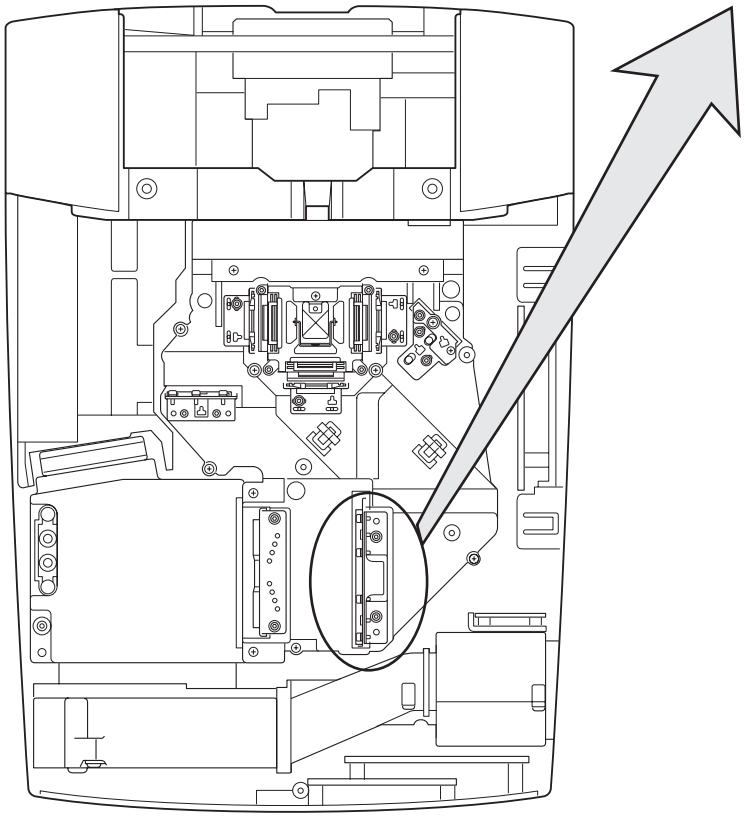


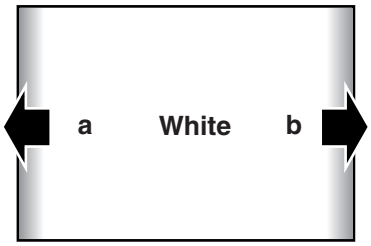
Fig.1-2

Condenser Lens adjustment

1 Turn the projector on by a state of without FPC cables.
2 Adjust the adjustment base of condenser lens ass'y to make color uniformity in white.
1) If the shading appears on the left or right of the screen as shown in **Fig.2-1**, loosen 2 screws **A** with the 2.0mm hex driver, and adjust the slot **B** to make color uniformity in white by using a slot screwdriver.
2) If the shading appears on the top or bottom of the screen as shown in **Fig.2-2**, loosen 2 screws **C** with the 2.0mm hex driver, and adjust the slot **D** to make color uniformity in white by using a slot screwdriver
3 Tighten screws **A** and **C** to fix the Condenser lens unit.

Note:
The relay lens adjustment must be carried out after completing this adjustment.





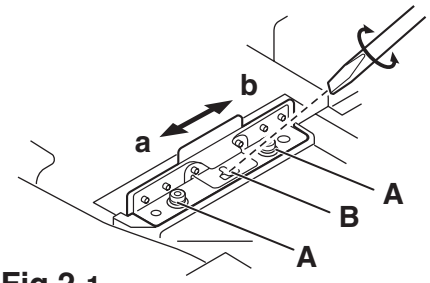
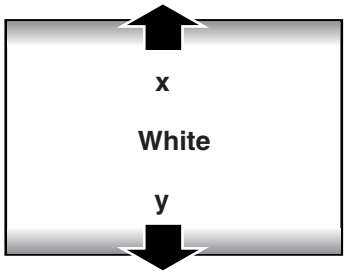


Fig.2-1
Moving of Slot B



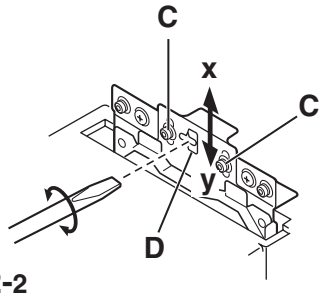


Fig.2-2
Moving of Slot D

Relay Lens-Out adjustment

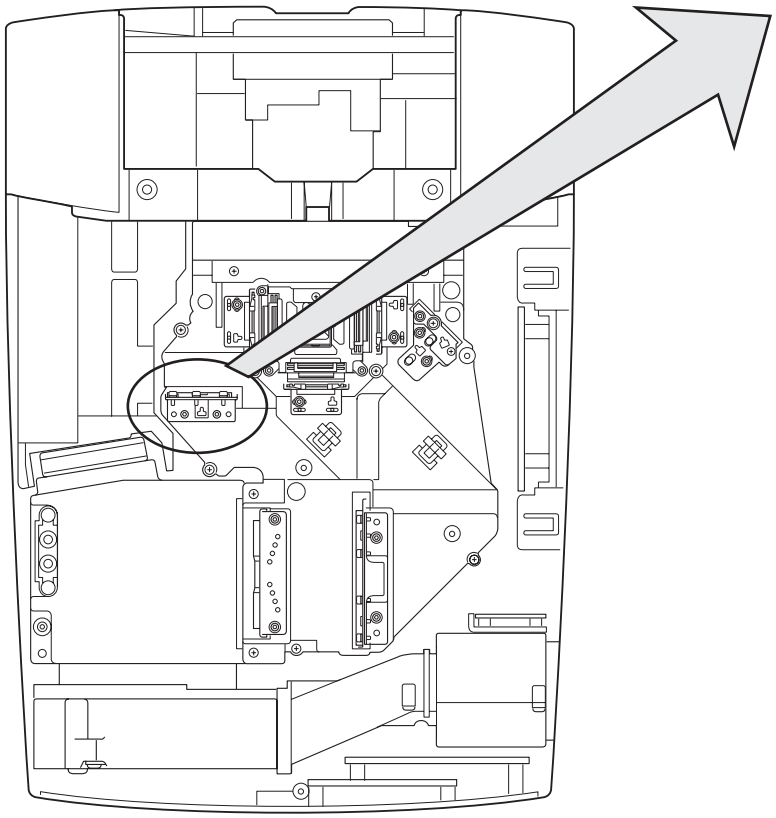
1 Turn the projector on by a state of without FPC cables.

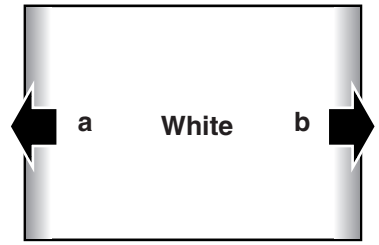
2 Adjust the adjustment base of relay lens ass'y to make color uniformity in white.

1) If the shading appears on the left or right of the screen as shown in **Fig.3-1**, loosen 2 screws **A** with the 2.0mm hex driver, and adjust the slot **B** to make color uniformity in white by using a slot screwdriver.

2) If the shading appears on the top or bottom of the screen as shown in **Fig.3-2**, loosen 2 screws **C** with the 2.0mm hex driver, and adjust the slot **D** to make color uniformity in white by using a slot screwdriver.

3 Tighten the screws **A** and **C** to fix the relay lens unit.





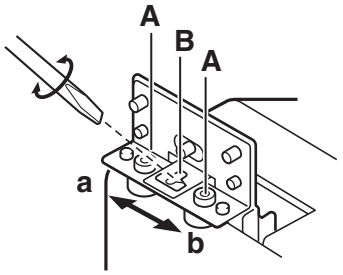
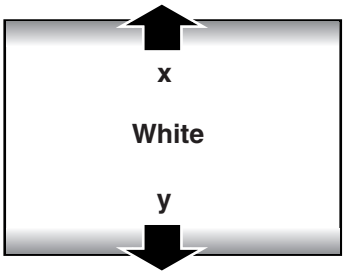


Fig.3-1
Moving of Slot B



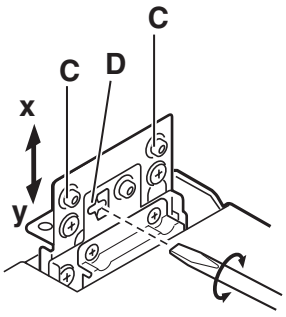


Fig.3-2
Moving of Slot D

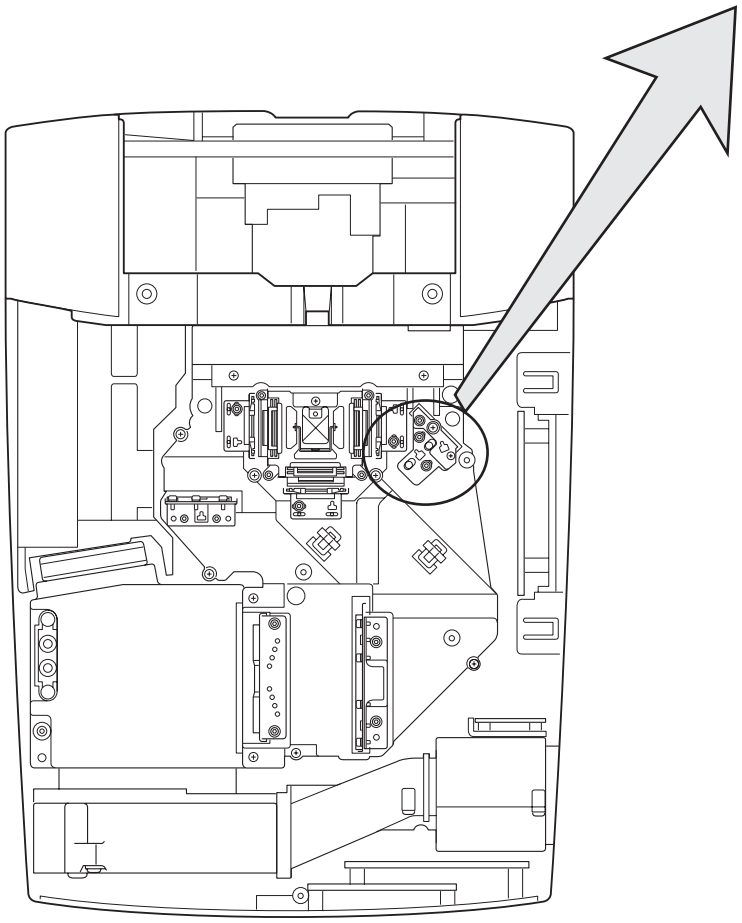
Mirror adjustment

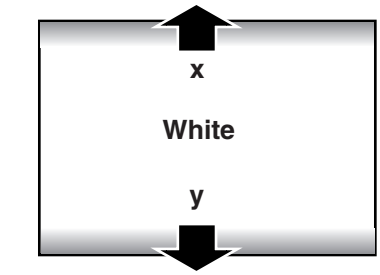
1 Turn the projector on by a state of without FPC cables.

2 Adjust the adjustment base of mirror to make color uniformity in white.

1) If the cyan bar appears on the top or bottom of the screen as shown in **Fig.4-1**, loosen 2 screws **A** with the 2.0mm hex driver, and adjust the screw **B** to make color uniformity in white by using a slot screwdriver.
2) If the shading appears on the left or right of the screen as shown in **Fig.4-2**, loosen 2 screws **C** with the 2.0mm hex driver, and adjust the slot **D** to make color uniformity in white by using a slot screwdriver.

3 Tighten the screws **A** and **C** to fix the relay lens unit.





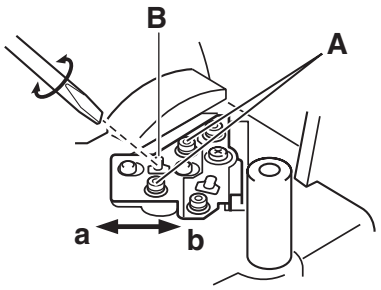
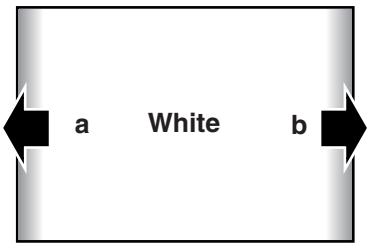


Fig.4-1
Moving of Slot B



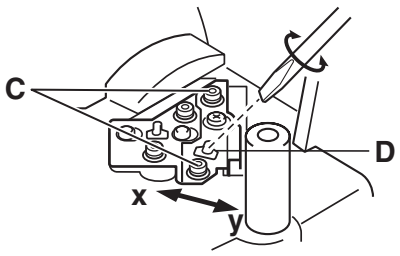


Fig.4-2
Moving of Slot D

■ Electrical Adjustments

● Service Adjustment Menu Operation

To enter the service mode

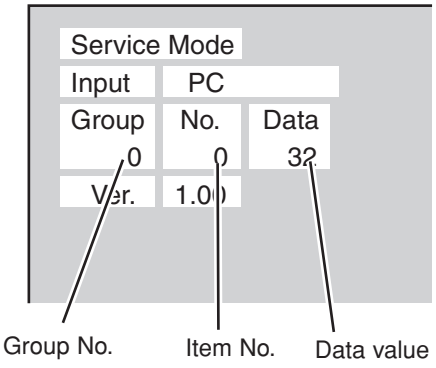
To enter the “Service Mode”, press and hold the **MENU** and **IMAGE button** on the projector at the same time for more than 3 seconds. The service menu appears on the screen as follows.

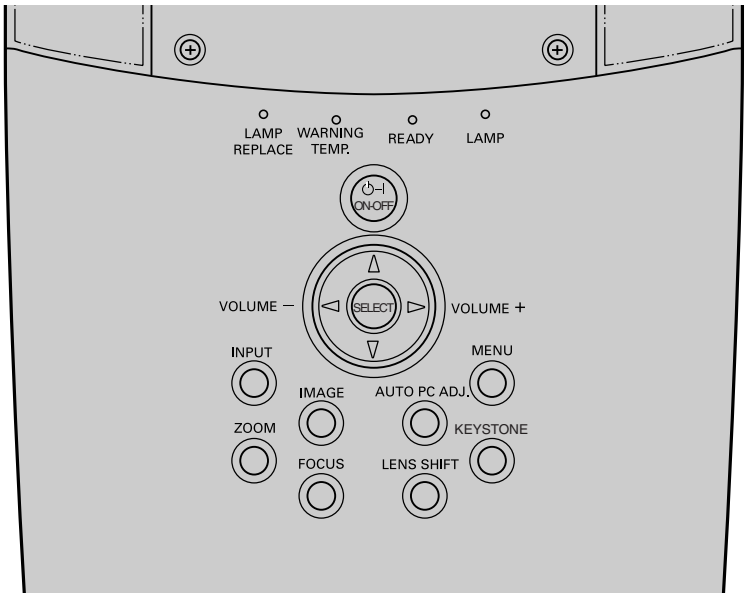
To adjust service data

Select the adjustment group no. (Group) by pressing the **MENU(+) button** or **IMAGE(-) button**, and select the adjustment item no. (No.) by pressing the ▲ or ▼ **button**, and change the data value (Data) by pressing the ◀ or ▶ **button**. Refer to the “Service Adjustment Data Table” for further description of adjustment group no., item no. and data value.

To exit the service mode

To exit the service mode, press the **POWER ON-OFF button** on the projector or remote control unit.





● Memory IC Replacement

IC808 on the main board stores the data for the service adjustments, and should not be replaced except for the case of defective device.
If replaced, the re-adjustments are required following to the “Electrical Adjustments”.
The data of lamp replacement counter is stored in the IC808.
Please note that the lamp replace counter will be reset when the memory IC (IC808) is replaced.
(Lamp replace counter can not be set to the previous value.)

● Caution to memory IC replacement

When IC808 is replaced with new one, the CPU writes down the default data of the service adjustments to the replaced IC as the mentioned on the service adjustment table. As these data are not the same data as factory shipped data, it should be required to perform the re-adjustments following to the “Electrical Adjustments”. Please note that in this case the lamp replace counter will be reset.

● Caution of Main Board replacement (in the case IC808 is not defective)

When the main board is replaced, IC808 should be replaced with the one on previous main board. After replacement, it should be required to perform the re-adjustments following to the “Electrical Adjustments”.
In this case, the lamp replace counter can be kept the value as before.

● Circuit Adjustments

CAUTION: The each circuit has been made by the fine adjustment at factory. Do not attempt to adjust the following adjustments except requiring the readjustments in servicing otherwise it may cause loss of performance and product safety.

[Adjustment Condition]

● Input signal

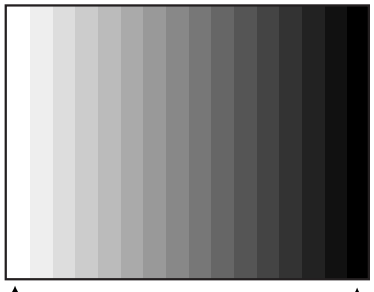
Video signal ..... 1.0Vp-p/75Ω terminated, 16 steps gray scale (Composite video signal)

Computer signal ..... 0.7Vp-p/75Ω terminated, 16 steps gray scale pattern (XGA)

Component Video signal ..... 0.7Vp-p/75Ω terminated, 16 steps gray scale (Component video signal with 480p or 1080i format)

● Picture control mode ..... "STANDARD" mode unless otherwise noted.

16 steps gray scale pattern



Note:

* Please refer to "Service Adjustment Menu Operation" for entering the service mode and adjusting the service data.

1 Fan Voltage adjustment

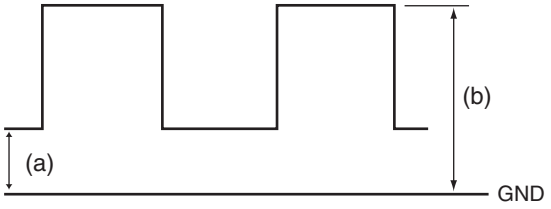
1. Set the lamp mode to "ECO" with the menu function.
2. Enter the service mode and select group no. "**11**" and Item no. "**5**". Set Data value to "**1**".
3. Connect a digital voltmeter to test point "**TPFAN1**" (+) and chassis ground (-).
4. Select group no. "**11**", Item no. "**86**" and adjust the voltage to be **4.5** ±0.1Vdc by changing the Data value.
   Select Item no. "**87**" and adjust the voltage to be **13.8** ±0.1Vdc by changing the Data value.
5. Connect a digital voltmeter to test point "**TPFAN2**" (+) and chassis ground (-).
6. Select Item no. "**88**" and adjust the voltage to be **4.5** ±0.1Vdc by changing the Data value.
   Select Item no. "**89**" and adjust the voltage to be **13.8** ±0.1Vdc by changing the Data value.
7. Connect a digital voltmeter to test point "**TPFAN3**" (+) and chassis ground (-).
8. Select Item no. "**90**" and adjust the voltage to be **4.5** ±0.1Vdc by changing the Data value.
   Select Item no. "**91**" and adjust the voltage to be **13.8** ±0.1Vdc by changing the Data value.
9. Select group no. "**11**" and Item no. "**5**". Set Data value to "**0**", and set the lamp mode to "Normal" with the menu function.

2 Video Center adjustment

1. Receive the 16-step gray scale computer signal with **Computer 1 [Analog RGB]** mode.
2. Enter the service mode.
3. Connect a digital voltmeter to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**5**", Item no. "**0**" and adjust the voltage to be **7.50** ±0.1Vdc by changing the Data value.
5. Connect a digital voltmeter to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**1**" and adjust the voltage to be **7.50** ±0.1Vdc by changing the Data value.
7. Connect a digital voltmeter to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**2**" and adjust the voltage to be **7.50** ±0.1Vdc by changing the Data value.

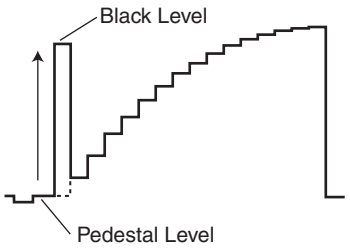
3 NRS adjustment

1. Receive the 16-step gray scale computer signal with **Computer 1 [Analog RGB]** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP2531**" (+) and chassis ground (-).
4. Select group no. "**5**", Item no. "**7**" and adjust the amplitude "a" to be **2.0** ±0.1V by changing the Data value.
5. Select Item no. "**6**" and adjust the amplitude "b" to be **7.1** ±0.1V by changing the Data value.



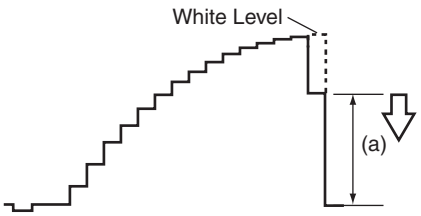
4 Pedestal adjustment (PC)

1. Receive the 16-step gray scale computer signal with **Computer 1 [Analog RGB]** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**5**", Item no. "**11**" and adjust the black level to be maximum amplitude by changing the Data value.
5. Connect an oscilloscope to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**12**" and adjust the black level to be maximum amplitude by changing the Data value.
7. Connect an oscilloscope to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**13**" and adjust the black level to be maximum amplitude by changing the Data value.



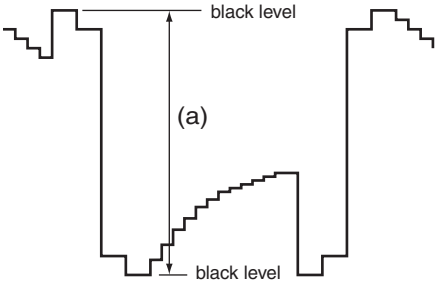
5 Video Gain adjustment (PC)

1. Receive the 16-step gray scale computer signal with **Computer 1 [Analog RGB]** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**4**", Item no. "**3**" and adjust the white level to be minimum amplitude by changing the Data value.
5. Connect an oscilloscope to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**4**" and adjust the white level to be minimum amplitude by changing the Data value.
7. Connect an oscilloscope to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**5**" and adjust the white level to be minimum amplitude by changing the Data value.



6 Black Level adjustment (PC)

1. Receive the 16-step gray scale computer signal with **Computer 1 [Analog RGB]** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**5**", Item no. "**3**" and adjust the amplitude "a" to be **10.0** ±0.1V by changing the Data value.
5. Connect an oscilloscope to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**4**" and adjust the amplitude "a" to be **9.25** ±0.1V by changing the Data value.
7. Connect an oscilloscope to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**5**" and adjust the amplitude "a" to be **10.0** ±0.1V by changing the Data value.



7 Luminance adjustment adjustment (PC)

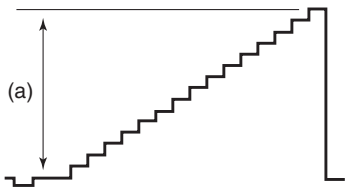
1. Receive the 100%whole-white computer signal with **Computer 1 [Analog RGB]** mode.
2. Enter the service mode.
3. Measure luminance on the screen with the luminance meter. It is **A** for the reading of luminance meter.
4. Change the signal source to the 50%whole-white computer signal with **Computer 1 [Analog RGB]** mode.
5. Select group no. "**4**", Item no. "**6**" and change the Data value to make the reading of luminance meter to be **A x 23%**.

8 A/D Ref. Voltage adjustment (Video)

1. Receive the 16-step gray scale composite video signal with **Video** mode.
2. Enter the service mode.
3. Connect a digital voltmeter to test point "**TPVRB**" (+) and chassis ground (-).
4. Select group no. "**5**", Item no. "**17**" and adjust the voltage to be **1.0** ±0.05Vdc by changing the Data value.
5. Connect a digital voltmeter to test point "**TPGVRT** (+) and chassis ground (-).
6. Select Item no. "**18**" and adjust the voltage to be **2.5** ±0.05Vdc by changing the Data value.

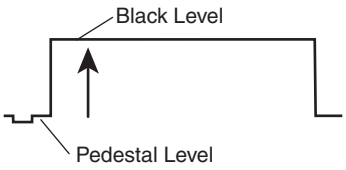
9 A/D Input adjustment (Video)

1. Receive the 16-step gray scale composite video signal with **Video** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP13G**" (+) and chassis ground (-).
4. Select group no. "**3**", Item no. "**1**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.
   * This changes all the RGB amplitude at the same time. Item no. "2" can be adjusted for G only.
5. Connect an oscilloscope to test point "**TP13B**" (+) and chassis ground (-).
6. Select Item no. "**3**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.
7. Connect an oscilloscope to test point "**TP13R**" (+) and chassis ground (-).
8. Select Item no. "**4**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.



10 Pedestal adjustment (Video)

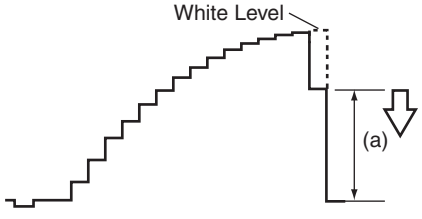
1. Receive the 100%whole-Black composite video signal with **Video** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**5**", Item no. "**11**" and adjust the black level to be maximum amplitude by changing the Data value.
5. Connect an oscilloscope to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**12**" and adjust the black level to be maximum amplitude by changing the Data value.
7. Connect an oscilloscope to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**13**" and adjust the black level to be maximum amplitude by changing the Data value.



Note: This adjustment should be done after A/D Input adjustment [Video].

11 Video Gain adjustment (Video)

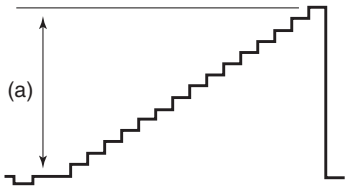
1. Receive the 16-step gray scale video composite signal with **Video** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**4**", Item no. "**3**" and adjust the white level to be minimum amplitude by changing the Data value.
5. Connect an oscilloscope to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**4**" and adjust the white level to be minimum amplitude by changing the Data value.
7. Connect an oscilloscope to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**5**" and adjust the white level to be minimum amplitude by changing the Data value.



12 A/D Input adjustment (Component)

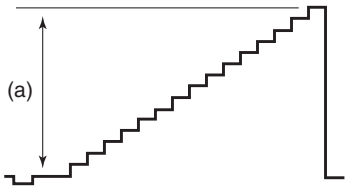
[1080i-A/D INPUT ADJUSTMENT]

1. Receive the 16-step gray scale component signal [1080i] with **Video [Y/Pb,Pr/Cb,Cr]** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP13G**" (+) and chassis ground (-).
4. Select group no. "**3**", Item no. "**1**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.
5. Connect an oscilloscope to test point "**TP13B**" (+) and chassis ground (-).
6. Select Item no. "**3**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.
7. Connect an oscilloscope to test point "**TP13R**" (+) and chassis ground (-).
8. Select Item no. "**4**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.



[480p-A/D INPUT ADJUSTMENT]

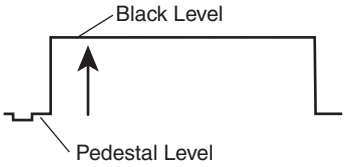
1. Receive the 16-step gray scale component signal [480p] with **Video [Y/Pb,Pr/Cb,Cr]** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP13G**" (+) and chassis ground (-).
4. Select group no. "**3**", Item no. "**1**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.
5. Connect an oscilloscope to test point "**TP13B**" (+) and chassis ground (-).
6. Select Item no. "**3**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.
7. Connect an oscilloscope to test point "**TP13R**" (+) and chassis ground (-).
8. Select Item no. "**4**" and adjust the amplitude "a" to be **1.35** ±0.1V by changing the Data value.



13 Pedestal adjustment (Component)

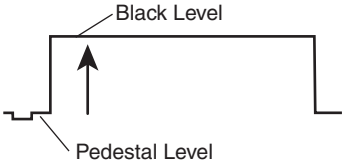
[1080i-PEDESTAL ADJUSTMENT]

1. Receive the 100%whole-Black component signal [1080i] with **Video [Y/Pb,Pr/Cb,Cr]** mode.
2. Enter the service mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**5**", Item no. "**11**" and adjust the black level to be maximum amplitude by changing the Data value.
5. Connect an oscilloscope to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**12**" and adjust the black level to be maximum amplitude by changing the Data value.
7. Connect an oscilloscope to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**13**" and adjust the black level to be maximum amplitude by changing the Data value.



[480p-PEDESTAL ADJUSTMENT]

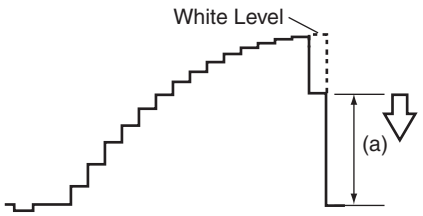
1. Receive the 100%whole-Black component signal [480p] with **Video [Y/Pb,Pr/Cb,Cr]** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**5**", Item no. "**11**" and adjust the black level to be maximum amplitude by changing the Data value.
5. Connect an oscilloscope to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**12**" and adjust the black level to be maximum amplitude by changing the Data value.
7. Connect an oscilloscope to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**13**" and adjust the black level to be maximum amplitude by changing the Data value.



Note: These adjustments should be done after A/D Input adjustment [Component].

14 Video Gain adjustment (Component)

1. Receive the 16-step gray scale component signal [1080i] with **Video [Y/Pb,Pr/Cb,Cr]** mode.
2. Enter the service mode.
3. Connect an oscilloscope to test point "**TP531**" (+) and chassis ground (-).
4. Select group no. "**4**", Item no. "**3**" and adjust the white level to be minimum amplitude by changing the Data value.
5. Connect an oscilloscope to test point "**TP501**" (+) and chassis ground (-).
6. Select Item no. "**4**" and adjust the white level to be minimum amplitude by changing the Data value.
7. Connect an oscilloscope to test point "**TP561**" (+) and chassis ground (-).
8. Select Item no. "**5**" and adjust the white level to be minimum amplitude by changing the Data value.



15 Luminance adjustment (Video)

1. Receive the 100%whole-white composite video signal with **Video** mode.
2. Enter the service mode.
3. Measure luminance on the screen with the luminance meter. It is **A** for the reading of luminance meter.
4. Change the signal source to the 50%whole-white composite video signal with **Video [Video]** mode.
5. Select group no. "**4**", Item no. "**6**" and change the Data value to make the reading of luminance meter to be **A x 22%**.

16 Common Center adjustment

1. Receive the 1dot Black/White computer signal with **Computer 1 [Analog RGB]** mode.
2. Enter the service mode.
3. Project only green light component to the screen.
4. Select group no. "**5**", Item no. "**9**" and change Data value to obtain the minimum flicker on the screen.
5. Project only blue light component to the screen.
6. Select Item no. "**10** and change Data value to obtain the minimum flicker on the screen.
7. Project only red light component to the screen.
8. Select Item no. "**8**" and change Data value to obtain the minimum flicker on the screen.

17 White Balance adjustment

[PC WHITE BALANCE ADJUSTMENT]

1. Receive the 100%-whole white computer signal with **Computer 1 [Analog RGB]** mode.
2. Enter the service mode.
3. Select group no. "**4**", Item no. "**7**" (Red) or "**8**" (Blue), and change Data values respectively to make a proper white balance.

[AV WHITE BALANCE ADJUSTMENT]

4. Receive the 100%-whole white video signal with **Video** mode.
5. Enter the service mode.
6. Select group no. "**4**", Item no. "**7**" (Red) or "**8**" (Blue), and change Data values respectively to make a proper white balance.

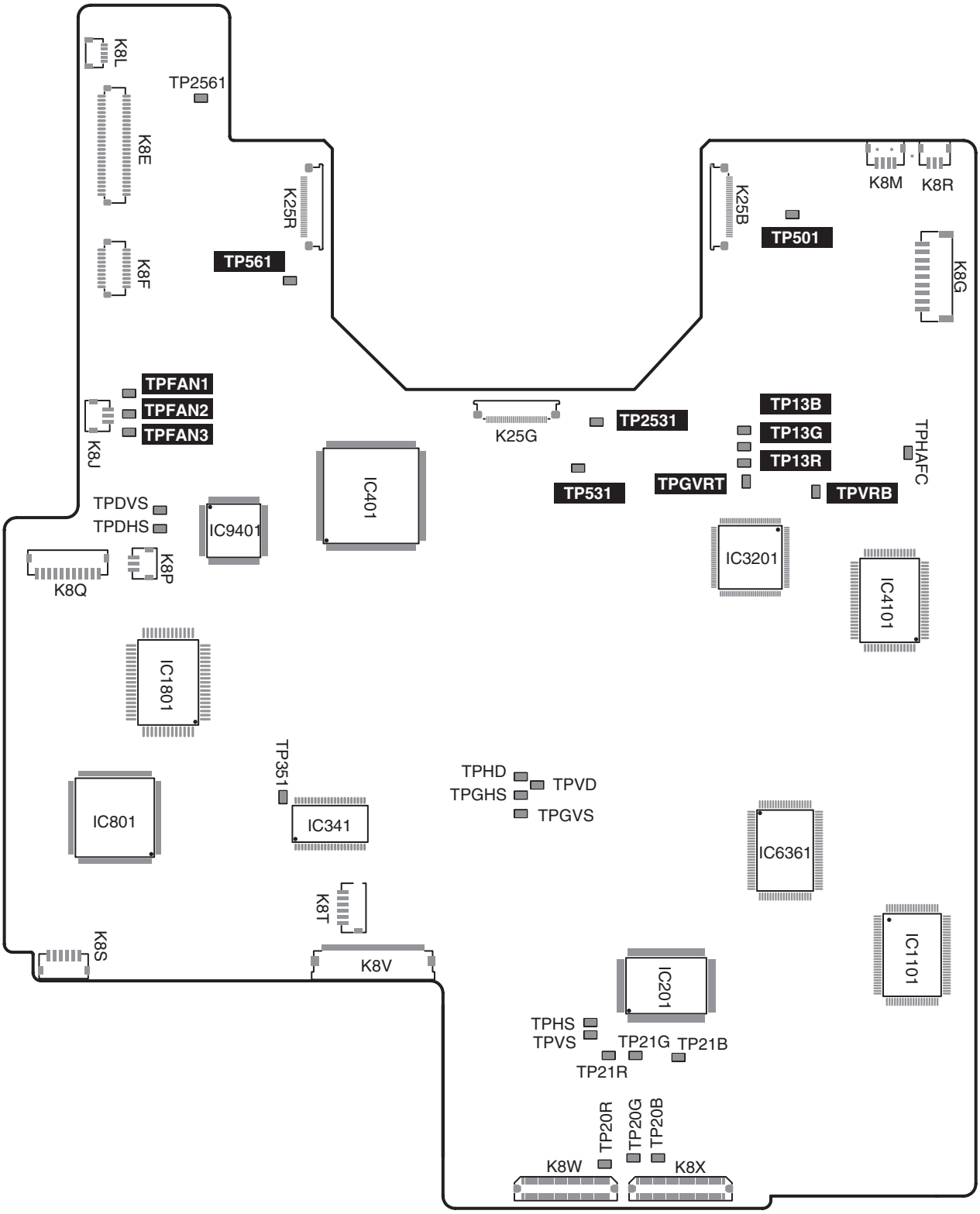
NOTE ON WHITE UNIFORMITY ADJUSTMENT

If you find the color shading at the some part of the screen, it needs to take the color shading adjustment. This adjustment should be performed by a computer and it also requires a special software "Color Shading Correction". The software will be supplied separately and can be ordered as follows;

COLOR SHADING CORRECTION SOFTWARE
Service Parts No. 645 051 2308

Test Points and Locations

● MAIN BOARD



● Service Adjustment Data Table

These initial values are the reference data written from the CPU ROM to memory IC when replaced new memory IC. The adjustment items indicated with "⁎" are required to readjust following to the "Electrical adjustments". Other items should be used with the initial data value.

No.	Adjustment Item	Initial Value	Range	Input source / Description
Group: 0	**TA1318**			
0	SEP_LEV	0/0/0/0	0 ~ 3	15KHz/31KHz/28KHz,33KHz/45KHz
1	HD_PHASE	29/38/36/32/32	0 ~ 63	1080i/720p/480p,1080i50/575i,PAL,SECAM/480i,NTSC
2	V_FREQ	-	-	Read only
3	H_FREQ	-	-	
4	HD_IN	-	-	
Group: 1	**uPD64083**			
0	NRMD	0	0 ~ 3	
1	HDP	4	0 ~ 7	
2	CDL	4	0 ~ 7	
3	DYCOR	4	0 ~ 15	
4	DYGAIN	15	0 ~ 15	
5	DCCOR	2	0 ~ 15	
6	DCGAIN	13	0 ~ 15	
7	VAPGAIN	3	0 ~ 15	
8	VAPINV	2	0 ~ 15	
9	YPFT	3	0 ~ 3	
10	YPFG	9	0 ~ 15	
11	V1PSEL	3	0 ~ 3	
12	VEGSEL	3	0 ~ 3	
13	CC3N	0	0 ~ 1	
14	SELD2FH	1	0 ~ 1	
15	SELD1FL	1	0 ~ 1	
16	YHCOR	0	0 ~ 3	
17	HPLLFG	1	0 ~ 1	
18	PLLFS	1	0 ~ 1	
19	KILR	3	0 ~ 15	
20	HSSL	12	0 ~ 15	
21	VSSL	3	0 ~ 15	
22	BGPS	7	0 ~ 15	
23	BGPW	3	0 ~ 15	
Group: 2	**TB1274**			
0	TINT	32	0 ~63	
1	SHP_EQ	2	0 ~ 3	
2	SHP_FO	2	0 ~ 3	
3	SHP_GAIN	8/8/8/8/8/8/8/8	0 ~15	VideoNT/ PAL,PALM,PALN/SECAM,BW60,BW50/ NT443/ PAL60/ S-Video/YCbCr/Scart
4	Y_OUT_LEVEL 0.7V	31/32/32/32/32 32/32/32/32/32/32/43	0 ~ 63	VideoNT/ NT443/ PAL,PALM,PALN/ PAL60/ SECAM,BW S-VideoNT,BW/ NT443/ PAL,PALM,PALN/ PAL60/ SECAM/ YCbCr/Scart
5	C_OUT_LEVEL 0.6V	12/12/15/15/22 12/12/15/15/22/38/38/27	0 ~ 63	VideoNT/ NT443/ PAL,PALM,PALN/ PAL60/ SECAM,BW S-VideoNT,BW/ NT443/ PAL,PALM,PALN/ PAL60/ SECAM/480i/575i/Scart
6	Y_DELAY	5/5/4/4/4 4/4/3/3/4	0 ~ 15	Video NT,BW60/ PAL,PALM,PALN,BW50/ SECAM/NT443/PAL60 S-Video NT,BW60/PAL,PALM,PALN,BW50/ SECAM/ NT443/ PAL60
7	COL_SYS	-	-	Read only(Data does not changed)
8	X'TAL	-	-	
9	NOISE_DET	-	-	
10	V_FREQ	-	-	
11	Vert. Std	-	-	
12	CID	-	-	
13	V_SIG	-	-	
14	MVM	0	0 or 1	
15	AFC_GAIN	1	0 ~ 3	
16	SECAM_GP,SECAM_ID	15	0 ~ 15	
17	LPF	1/1	0 or 1	w/o Scart/Scart
Group: 3	**CXA2101**			
0	BRIGHT	30/25/25	0 ~ 63	NT,PAL,SECAM,NT443,PALM,PALN,480i,575i/ 480p,575p/ 1080i,1035i,720p
1	PICTURE	40/45/45	0 ~ 63	NT,PAL,SECAM,NT443,PALM,PALN,480i,575i/ 480p,575p/ 1080i,1035i,720p ⁎ G-A/D Input Gain Adjustment
2	G_DRIVE	30	0 ~ 63	
3	B_DRIVE	30/31/31	0 ~ 63	NT,NT443,PAL,PALM,PALN,480i,575i/ 480p,575p/ 1080i,1035i,720p ⁎ B-A/D Input Gain Adjustment
4	R_DRIVE	30/31/31	0 ~ 63	NT,NT443,PAL,PALM,PALN,480i,575i/ 480p,575p/ 1080i,1035i,720p ⁎ R-A/D Input Gain Adjustment
5	HSEP_SEL	1	0 ~ 1	
6	CR_OFFSET1	7	0 ~ 15	
7	CB_OFFSET1	7	0 ~ 15	
8	BLK_BOTTOM	15	0 ~ 15	
9	R-Y/R	12/13/6/6	0 ~ 15	NT,NT443,480i,480p/PAL,PALM,PALN,PAL60,SECAM,575i,575p/1035i/1080i,720p
10	R-Y/B	12/15/5/5	0 ~ 15	
11	G-Y/R	12/12/8/8	0 ~ 15	
12	G-Y/B	5/4/10/10	0 ~ 15	
13	MAT_OUT	0/0/0/1	0 ~ 3	
14	SYSTEM	0/1/2/2	0 ~ 3	NT,NT443,PAL,PALM,PALN,SECAM,480i,575i/ 480p,575p/ 1080i60,1035i,720p/1080i50
15	V_TC	2/1/1/0	0 ~ 3	
16	H_WIDTH	2/1/1/0	0 ~ 3	
17	HD_TC	1/1/0/0	0 ~ 1	
18	HS_MASK	0/1/1/1	0 ~ 1	
19	CTI_LEVEL	2/1/1/0/0	0 ~ 3	NT,NT443,PAL,PALM,PALN,SECAM/ 480i,575i/ 480p,575p/ 1080i60,1035i,720p/ 1080i50
20	SUB_SHP	2/2/1/1	0 ~ 3	NT,NT443,PAL,SECAM,PALM,PALN,480i,575i/ 480p,575p/ 1080i60,1035i,720p/ 1080i50
21	SHP_FO	3/3/3/3	0 ~ 3	
22	PRE_OVER	2/3/0/0	0 ~ 3	

No.	Adjustment Item	Initial Value	Range	Input source / Description
23	LTI_LEVEL	1/1/0/0	0 ~ 3	NT,NT443,PAL,SECAM,PALM,PALN,480i,575i/ 480p,575p / 1080i60,1035i,720p/ 1080i50
24	D_PIC	0/0/1/1	0 ~ 3	NT,NT443,PAL,SECAM,PALM,PALN,480i,575i/ 480p,575p / 1080i60,1035i,720p/ 1080i50
25	HUE	31/31/31	0 ~ 63	PAL,PALM,PALN,PAL60,SECAM/ 575i,575p, only possible to adjust in these mode
26	SUB_COL	7/7/7/8/6/9	0 ~ 15	NT,NT443/PAL,PALM,PALN,PAL60,SECAM/480i,480p/575i,575p/1035i/1080i,720p
27	SUB_HUE	7/7/8/7/9/6	0 ~ 15	NT,NT443/PAL,PALM,PALN,PAL60,SECAM/480i,480p/575i,575p/1035i/1080i,720p
28	CINEMA CTI_LEVEL	2		
29	CINEMA LTI_LEVEL	0		
Group: 4	**L3E07050**			
0	G_SUB_BRT	0/0	0 ~ 1023	PC/DVI,AV_502
1	B_SUB_BRT	0/0	0 ~ 1023	_902
2	R_SUB_BRT	0/0	0 ~ 1023	_102
3	G_SUB_GAIN	367/390/300/420	0 ~ 1023	PC/AV/DVI/HD _501 ※ G-PC GainI Adjustment
4	B_SUB_GAIN	367/390/300/420	0 ~ 1023	Data of Gamma at point 980 is set 500 temporary when entering the mode. _901 ※ B-PC GainI Adjustment
5	R_SUB_GAIN	367/390/300/420	0 ~ 1023	_101 ※ R-PC GainI Adjustment
6	Standard G GAMMA SHIFT	390/390	0 ~ 1023	_503 PC,DVI std/AV StdCenter 512 * Change RGB data at same time when changing G. ※ Luminance Adjustment
7	Standard B GAMMA SHIFT	390/390	0 ~ 1023	_903 PC,DVI std/AV Std Center 512 ※ R-White Balance Adjustment
8	Standard R GAMMA SHIFT	390/390	0 ~ 1023	_103 PC,DVI std/AV Std Center 512 ※ B-White Balance Adjustment
9	Standard GAMMA 0	0/0	0 ~ 1023	
10	Standard GAMMA 1	150/140	0 ~ 1023	PC,DVI Standard / AV Standard
11	Standard GAMMA 2	253/245	0 ~ 1023	Read only
12	Standard GAMMA 3	359/367	0 ~ 1023	
13	Standard GAMMA 4	448/460	0 ~ 1023	
14	Standard GAMMA 5	524/522	0 ~ 1023	
15	Standard GAMMA 6	598/599	0 ~ 1023	
16	Standard GAMMA 7	643/645	0 ~ 1023	
17	Standard GAMMA 8	680/680	0 ~ 1023	
18	Standard GAMMA 9	708/708	0 ~ 1023	
19	Standard GAMMA 10	736/735	0 ~ 1023	
20	Standard GAMMA 11	766/764	0 ~ 1023	
21	Standard GAMMA 12	801/796	0 ~ 1023	
22	Standard GAMMA 13	844/840	0 ~ 1023	
23	Standard GAMMA 14	920/885	0 ~ 1023	
24	Standard GAMMA 15	1023/980	0 ~ 1023	
25	Real/Cinema G GAMMA SHIFT	506/506	0 ~ 1023	_503 Difference PC,DVI Real / AV Cinema(Difference from Standard)
26	Real/Cinema B GAMMA SHIFT	502/502	0 ~ 1023	_903 Difference
27	Real/Cinema R GAMMA SHIFT	512/512	0 ~ 1023	_103 Difference
28	Real/Cinema GAMMA 0	512/512	0 ~ 1023	
29	Real/Cinema GAMMA 1	528/527	0 ~ 1023	PC,DVI Real / AV Cinema(Difference from Standard)
30	Real/Cinema GAMMA 2	527/521	0 ~ 1023	
31	Real/Cinema GAMMA 3	525/519	0 ~ 1023	
32	Real/Cinema GAMMA 4	523/516	0 ~ 1023	
33	Real/Cinema GAMMA 5	519/215	0 ~ 1023	
34	Real/Cinema GAMMA 6	515/510	0 ~ 1023	
35	Real/Cinema GAMMA 7	510/208	0 ~ 1023	
36	Real/Cinema GAMMA 8	505/508	0 ~ 1023	
37	Real/Cinema GAMMA 9	503/503	0 ~ 1023	
38	Real/Cinema GAMMA 10	501/501	0 ~ 1023	
39	Real/Cinema GAMMA 11	499/499	0 ~ 1023	
40	Real/Cinema GAMMA 12	496/496	0 ~ 1023	
41	Real/Cinema GAMMA 13	492/492	0 ~ 1023	
42	Real/Cinema GAMMA 14	488/488	0 ~ 1023	
43	Real/Cinema GAMMA 15	512/512	0 ~ 1023	
44	r_mid2_level	464	0 ~ 1023	_C9D
45	r_mid1_level	560	0 ~ 1023	_C9E
46	r_max_level	632	0 ~ 1023	_C9F
47	g_mid2_level	464	0 ~ 1023	_CA1
48	g_mid1_level	560	0 ~ 1023	_CA2
49	g_max_level	632	0 ~ 1023	_CA3
50	b_mid2_level	464	0 ~ 1023	_CA5
51	b_mid1_level	560	0 ~ 1023	_CA6
52	b_max_level	632	0 ~ 1023	_CA7
53	Correction for Vertical line R2	0	0 ~ 255	_C48
54	Correction for Vertical line G2	0	0 ~ 255	_C4D
55	Correction for Vertical line B2	0	0 ~ 255	_C52
56	Coorection for R-ghost	8	0 ~ 2047	_C58
57	Coorection for G-ghost	8	0 ~ 2047	_C58
58	Coorection for B-ghost	8	0 ~ 2047	_C58
Group: 5	**DAC**			
0	G_VIDEO_CENTER	120	0 ~ 255	dac1 ※ G-Video Center Adjustment
1	B_VIDEO_CENTER	120	0 ~ 255	dac1 ※ B-Video Center Adjustment
2	R_VIDEO_CENTER	120	0 ~ 255	dac1 ※ R-Video Center Adjustment
3	REF_G	60	0 ~ 255	dac1 ※ G-Black Level Adjustment
4	REF_B	60	0 ~ 255	dac1 ※ B-Black Level Adjustment
5	REF_R	60	0 ~ 255	dac1 ※ R-Black Level Adjustment
6	NRSB	160	0 ~ 255	NRSB ※ NRS Adjustment
7	NRSA	40	0 ~ 255	NRSA ※ NRS Adjustment
8	G_V_COM	55	0 ~ 255	dac2 ※ G Common Center Adjustment
9	B_V_COM	55	0 ~ 255	dac2 ※ B Common Center Adjustment
10	R_V_COM	55	0 ~ 255	dac2 ※ R Common Center Adjustment
11	G_CLMP	90 / 95	0 ~ 255	PC/AV ※ G-Pedestal Adjustment
12	B_CLMP	90 / 95	0 ~ 255	It differs the control port in PC and AV ※ B-Pedestal Adjustment
13	R_CLMP	90 / 95	0 ~ 255	※ R-Pedestal Adjustment
14	G_BLK_DC	80/80/80	0 ~ 255	AV Pedestal Adjustment video/1080i,1035i,720p/480p,525p
15	B_BLK_DC	80/80/80	0 ~ 255	AV Pedestal Adjustment video/1080i,1035i,720p/480p,525p

No.	Adjustment Item	Initial Value	Range	Input source / Description
16	R_BLK_DC	80/80/80	0 ~ 255	AV Pedestal Adjustment video/1080i,1035i,720p/480p,525p
17	VRB	115	0 ~ 255	dac3 ※ A/D Ref Voltage Adjustment [BOTTOM]
18	GVRT	130	0 ~ 255	dac2 ※ A/D Ref Voltage Adjustment [TOP]
19	BVRT	130	0 ~ 255	dac2
20	RVRT	130	0 ~ 255	dac2
21	R_V_COM_CEILING	0	0 ~ 255	dac2 R-common center adjustment, deferential value at Ceiling On (0: ±0, 1: +1, 255: -1)
22	G_V_COM_CEILING	0	0 ~ 255	dac2 G-common center adjustment, deferential value at Ceiling On (0: ±0, 1: +1, 255: -1)
23	B_V_COM_CEILING	0	0 ~ 255	dac2 B-common center adjustment, deferential value at Ceiling On (0: ±0, 1: +1, 255: -1)
24	NRSB_CEILING	0	0 ~ 255	NRSB , deferential value at Ceiling On (0: ±0, 1: +1, 255: -1)
25	NRSA_CEILING	0	0 ~ 255	NRSA , deferential value at Ceiling On (0: ±0, 1: +1, 255: -1)
Group: 6 TC90A69F				
0	Y-EQ_GAIN	3	0 ~ 3	
1	Y-EQ_N_C_LIM	3	0 ~ 3	
2	V-ENH_GAIN	4	0 ~ 7	
3	V_ENH_CORING	2	0 ~ 3	
4	NTSC443_SW	1	0 ~ 1	Set for input signal system 0:NTSC4.431:PAL60 (It is effective when input signal is NTSC4.43)
Group: 10 Option				
0	Lamp Time Monitor	-	0~8738	Read only
1	RS232C Baudrate	0	0 ~ 1	0: 19200bps1: 9600bps
2	Shootout Mode	0	0 ~ 1	1: Shoot Out Mode Enable0: Disable
3	Cooling Time	3	0 ~ 15	Cooling time setting 1:30 sec. 3:90 sec. 15:450 sec. 0:continuously On
4	Hi-Land SW	0	0 ~ 255	0: Land mode(Normal operation) 1: High-land mode(Fan spinning in max speed)
5	V-Douki SW	0	0 ~ 1	0:V synchronized1:V not synchronized
6	Lamp Total Time	-	0~65535	Read only
7	Net Board Reset	1	0 ~ 1	0: Reset unable, 1: Reset enable
8	Keystone Option	0	0 ~ 1	0:Fixed limitation 1:Change limitation according to input signal
9	Syukka SW	0	0 ~ 10	Reset user control value when the data changes to 10 and turns to 0.
10	Color Shading SW	1	0 ~ 1	0:On 1:Off
11	RC Enable/Disable	0	0 ~ 3	0: Activate both Front and Rear RC 1:Prohibition-Front 2:Prohibition-Front 3:Deactivate both Front and Rear RC
12	Lamp Dim Level	0	0 ~ 10	0: Maximum (250W)10:Minimum(200W)
13	Lamp Warning Time	1000	0~65535	in hours, can not be changed
14	Forced NOBRAND	0	0 ~ 1	0:Normal 1:On
15	Forced Video Mute Off	0	0 ~ 1	0:VideoMuteOn(Normal) 1:Forced VideoMuteOff
16	Fan Control SW for Testing	0	0 ~ 4	0: Normal, 1: Normal Min., 2: NormalMax., 3: Eco Min., 4: Eco Max. but not be memorized
Group: 11 Fan Control				
0	FAN_TEMP_A_WARNING	39	30 ~ 100	Temperature A to judge the abnormal (Not memorized) Room
1	FAN_TEMP_B_WARNING	50	30 ~ 100	Temperature B to judge the abnormal (Not memorized) Panel
2	FAN_TEMP_C_WARNING	67	30 ~ 100	Temperature C to judge the abnormal (Not memorized)lamp
3	FAN_TEMP_B-A_WARNING	25	0 ~ 100	Temperature B-A to judge the abnormal (Not memorized) Detection of filter croggle
4	FAN_TEMP_C-A_WARNING	43	0 ~ 100	Temperature C-A to judge the abnormal (Not memorized) Detection of filter croggle
5	FAN_CONTROL_SW	0	0 or 1	0:Fan Control automatically 1:Fan Control Manually ※ FAN Voltage Adjustment
6	FAN_A_SPEED	-	0 ~ 255	Only effective when FAN_CONTROL_SW = 1
7	FAN_B_SPEED	-	0 ~ 255	Initial Normal/Eco
8	FAN_C_SPEED	-	0 ~ 255	
9	FAN_TEMP_A_MONI	-	-	Read only
10	FAN_TEMP_B_MONI	-	-	
11	FAN_TEMP_C_MONI	-	-	
12	FAN_ANZEN_MINMAX	1	0 or 1	Only effective when FAN_CONTROL_SW=1, it can be used with10-12 but not be memorized.
13	TEMP_NOWARNING_TIME	3	0 ~ 5	Do not detect temp error within specified time after turn on.
14	NOR_TEMP_FAN1_MIN	28		FAN1 temperature to start the control, Normal
15	NOR_TEMP_FAN1_MAX	36		FAN1 temperature to end the control, Normal
16	NOR_TEMP_FAN2_MIN	28	0~255	FAN2 temperature to start the control, Normal
17	NOR_TEMP_FAN2_MAX	36		FAN2 temperature to end the control, Normal
18	NOR_TEMP_FAN3_MIN	28		FAN3 temperature to start the control, Normal
19	NOR_TEMP_FAN3_MAX	36		FAN3 temperature to end the control, Normal
20	NOR_VALU_FAN1_MIN	90		FAN1 control minimum value, Normal(0: Fan voltage 0V, 255:Fan voltage 25.5V)
21	NOR_VALU_FAN1_MAX	135		FAN1 control maximum value, Normal
22	NOR_VALU_FAN2_MIN	80	0~255	FAN2 control minimum value, Normal
23	NOR_VALU_FAN2_MAX	135		FAN2 control maximum value, Normal
24	NOR_VALU_FAN3_MIN	70		FAN3 control minimum value, Normal
25	NOR_VALU_FAN3_MAX	105		FAN3 control maximum value, Normal
26	ECO_TEMP_FAN1_MIN	28		FAN1 temperature to start the control, Eco
27	ECO_TEMP_FAN1_MAX	36		FAN1 temperature to end the control, Eco
28	ECOTEMP_FAN2_MIN	28	0~255	FAN2 temperature to start the control, Eco
29	ECO_TEMP_FAN2_MAX	36		FAN2 temperature to end the control, Eco
30	ECO_TEMP_FAN3_MIN	28		FAN3 temperature to start the control, Eco
31	ECO_TEMP_FAN3_MAX	36		FAN3 temperature to end the control, Eco
32	ECO_VALU_FAN1_MIN	55		FAN1 control minimum value, Eco
33	ECO_VALU_FAN1_MAX	120		FAN1 control maximum value, Eco
34	ECO_VALU_FAN2_MIN	70	0~255	FAN2 control minimum value, Eco
35	ECO_VALU_FAN2_MAX	100		FAN2 control maximum value, Eco
36	ECO_VALU_FAN3_MIN	55		FAN3 control minimum value, Eco
37	ECO_VALU_FAN3_MAX	75		FAN3 control maximum value, Eco
38	HINOR_TEMP_FAN1_MIN	22		FAN1 temperature to start the control, HighLand Normal
39	HINOR_TEMP_FAN1_MAX	32		FAN1 temperature to end the control, HighLand Normal22
40	HINOR_TEMP_FAN2_MIN	22	0~255	FAN2 temperature to start the control, HighLand Normal
41	HINOR_TEMP_FAN2_MAX	32		FAN2 temperature to end the control, HighLand Normal
42	HINOR_TEMP_FAN3_MIN	22		FAN3 temperature to start the control, HighLand Normal
43	HINOR_TEMP_FAN3_MAX	32		FAN3 temperature to end the control, HighLand Normal
44	HINOR_VALU_FAN1_MIN	90		FAN1 control minimum value, HighLand Normal (0: Fan voltage 0V, 255:Fan voltage 25.5V)
45	HINOR_VALU_FAN1_MAX	138		FAN1 control maximum value, HighLand Normal

No.	Adjustment Item	Initial Value	Range	Input source / Description
46	HINOR_VALU_FAN2_MIN	95	0~255	FAN2 control minimum value, HighLand Normal
47	HINOR_VALU_FAN2_MAX	138		FAN2 control maximum value, HighLand Normal
48	HINOR_VALU_FAN3_MIN	90		FAN3 control minimum value, HighLand Normal
49	HINOR_VALU_FAN3_MAX	115		FAN3 control maximum value, HighLand Normal
50	HIECO_TEMP_FAN1_MIN	22		FAN1 temperature to start the control, HighLand Eco
51	HIECO_TEMP_FAN1_MAX	32		FAN1 temperature to end the control, HighLand Eco
52	HIECOTEMP_FAN2_MIN	22	0~255	FAN2 temperature to start the control, HighLand Eco
53	HIECO_TEMP_FAN2_MAX	32		FAN2 temperature to end the control, HighLand Eco
54	HIECO_TEMP_FAN3_MIN	22		FAN3 temperature to start the control, HighLand Eco
55	HIECO_TEMP_FAN3_MAX	32		FAN3 temperature to end the control, HighLand Eco
56	HIECO_VALU_FAN1_MIN	75		FAN1 control minimum value, HighLand Eco
57	HIECO_VALU_FAN1_MAX	110		FAN1 control maximum value, HighLand Eco
58	HIECO_VALU_FAN2_MIN	85	0~255	FAN2 control minimum value, HighLand Eco
59	HIECO_VALU_FAN2_MAX	100		FAN2 control maximum value, HighLand Eco
60	HIECO_VALU_FAN3_MIN	70		FAN3 control minimum value, HighLand Eco
61	HIECO_VALU_FAN3_MAX	90		FAN3 control maximum value, HighLand Eco
62	CLNOR_TEMP_FAN1_MIN	28		FAN1 temperature to start the control, Ceiling Normal
63	CINOR_TEMP_FAN1_MAX	36		FAN1 temperature to end the control, Ceiling Normal
64	CLNOR_TEMP_FAN2_MIN	28	0~255	FAN2 temperature to start the control, Ceiling Normal
65	CLNOR_TEMP_FAN2_MAX	36		FAN2 temperature to end the control, Ceiling Normal
66	CLNOR_TEMP_FAN3_MIN	28		FAN3 temperature to start the control, Ceiling Normal
67	CLNOR_TEMP_FAN3_MAX	36		FAN3 temperature to end the control, Ceiling Normal
68	CLNOR_VALU_FAN1_MIN	90		FAN1 control minimum value, Ceiling Normal (0: Fan voltage 0V, 255:Fan voltage 25.5V)
69	CLNOR_VALU_FAN1_MAX	135		FAN1 control maximum value, Ceiling Normal
70	CLNOR_VALU_FAN2_MIN	80	0~255	FAN2 control minimum value, Ceiling Normal
71	CLNOR_VALU_FAN2_MAX	135		FAN2 control maximum value, Ceiling Normal
72	CLNOR_VALU_FAN3_MIN	70		FAN3 control minimum value, Ceiling Normal
73	CLNOR_VALU_FAN3_MAX	105		FAN3 control maximum value, Ceiling Normal
74	CLECO_TEMP_FAN1_MIN	28		FAN1 temperature to start the control, Ceiling Eco
75	CLECO_TEMP_FAN1_MAX	36		FAN1 temperature to end the control, Ceiling Eco
76	CLECOTEMP_FAN2_MIN	28	0~255	FAN2 temperature to start the control, Ceiling Eco
77	CLECO_TEMP_FAN2_MAX	36		FAN2 temperature to end the control, Ceiling Eco
78	CLECO_TEMP_FAN3_MIN	28		FAN3 temperature to start the control, Ceiling Eco
79	CLECO_TEMP_FAN3_MAX	36		FAN3 temperature to end the control, Ceiling Eco
80	CLECO_VALU_FAN1_MIN	55		FAN1 control minimum value, Ceiling Eco
81	CLECO_VALU_FAN1_MAX	120		FAN1 control maximum value, Ceiling Eco
82	CLECO_VALU_FAN2_MIN	70	0~255	FAN2 control minimum value, Ceiling Eco
83	CLECO_VALU_FAN2_MAX	100		FAN2 control maximum value, Ceiling Eco
84	CLECO_VALU_FAN3_MIN	55		FAN3 control minimum value, Ceiling Eco
85	CLECO_VALU_FAN3_MAX	75		FAN3 control maximum value, Ceiling Eco
86	FAN1_ADJUST_VOLT_MIN	27		FAN1 DAC adjustment value at minimum drive voltage ※ FAN Voltage Adjustment [FAN1]
87	FAN1_ADJUST_VOLT_MAX	249		FAN1 DAC adjustment value at maximum drive voltage ※ FAN Voltage Adjustment [FAN1]
88	FAN2_ADJUST_VOLT_MIN	27		FAN2 DAC adjustment value at minimum drive voltage ※ FAN Voltage Adjustment [FAN2]
89	FAN2_ADJUST_VOLT_MAX	249		FAN2 DAC adjustment value at maximum drive voltage ※ FAN Voltage Adjustment [FAN2]
90	FAN3_ADJUST_VOLT_MIN	27		FAN3 DAC adjustment value at minimum drive voltage ※ FAN Voltage Adjustment [FAN3]
91	FAN3_ADJUST_VOLT_MAX	249		FAN3 DAC adjustment value at maximum drive voltage ※ FAN Voltage Adjustment [FAN3]
92	CL_FAN_TEMP_A_WARNING	39		
93	CL_FAN_TEMP_B_WARNING	47		
94	CL_FAN_TEMP_C_WARNING	67	0~255	
95	CL_FAN_TEMP_BÀ¦Ç¯_WARNING	23		
96	CL_FAN_TEMP_CÀ¦Ç¯_WARNING	39		
97	HI_FAN_TEMP_A_WARNING	35		
98	HI_FAN_TEMP_B_WARNING	49		
99	HI_FAN_TEMP_C_WARNING	67		
100	HI_FAN_TEMP_BÀ¦Ç¯_WARNING	29		
101	HI_FAN_TEMP_CÀ¦Ç¯_WARNING	48		
Group: 12 PC Real / AV Cinema				
0	PC Real Contrast	32	0 ~ 63	
1	PC Real Brightness	32	0 ~ 63	
2	PC Real Red	32	0 ~ 63	
3	PC Real Green	30	0 ~ 63	
4	PC Real Blue	29	0 ~ 63	
5	PC Real Gamma	8	0 ~ 15	
6	AV Cinema Contrast	32	0 ~ 63	
7	AV Cinema Brightness	32	0 ~ 63	
8	AV Cinema Color	32	0 ~ 63	
9	AV Cinema Tint	32	0 ~ 63	
10	AV Cinema Red	32	0 ~ 63	
11	AV Cinema Green	30	0 ~ 63	
12	AV Cinema Blue	29	0 ~ 63	
13	AV Cinema Sharpness	15	0 ~ 31	
14	AV Cinema Gamma	8	0 ~ 15	
15	AV Cinema N.R.	1	0 or 2	
16	AV Cinema PROGRESSIVE	1	0 or 1	
Group: 20 IP Conversion				
0	IMAGE_IN_FUNC_POL	0/0/0/0/0/0/0/0	0 or 1	000-b4 (reg 0)NTSC/PAL/480p/575p/1035i/1080i,1080i50/720p/480i/575i
1	IMAGE_IN_HD_SEL	1/1/1/1/1/1/1/1	0 or 1	000-b3
2	IMAGE_IN_HD_POL	1/1/1/1/1/1/1/1	0 or 1	000-b2
3	IMAGE_IN_VD_POL	1/1/1/1/1/1/1/1	0 or 1	000-b1
4	IMAGE_IN_LPF_SEL	0/0/0/0/0/0/0/0	0 or 1	000-b0
5	IMAGE_OUT_CLK_POL	0/0/0/0/0/0/0/0	0 or 1	001-b5
6	IMAGE_OUT_HD_POL	0/0/0/0/0/0/0/0	0 or 1	001-b4
7	IMAGE_OUT_VD_POL	0/0/0/0/0/0/0/0	0 or 1	001-b3

No.	Adjustment Item	Initial Value	Range	Input source / Description
8	IMAGE_OUT_CS_SEL	0/0/0/0/0/0/0/0	0 or 1	001-b2
9	IMAGE_OUT_DEMUX	1/1/1/1/1/1/1/1	0 or 1	001-b1
10	IMAGE_OUT_THROUGH	0/0/1/1/1/1/0/0	0 or 1	001-b0
11	IMAGE_IN_TOTAL_H	Same as G510~G517	0 ~ 2047	002/003 Read only
12	IMAGE_IN_START_H	54/55/76/74 78/78/76/54/73	0 ~ 2047	004/005
13	IMAGE_IN_SIZE_H	10/10/10/10/9/9/11/10/10	0 ~ 15	006 Read only
14	IMAGE_IN_START_V,	15/21/30/38 35/16/22/15/2	0 ~ 1023	007/008
15	IMAGE_IN_SIZE_V,	249/293/488/ 587/545/545/ 725/249/293	0 ~ 1023	009/010
16	CLAMP_H,	1260/1310/88/94 30/30/62/76/80	0 ~ 2047	011/012
17	CLAMP_L,	186/224/130/162 55/55/205/180/216	0 ~ 2047	013/014
18	IMAGE_OUT_DELAY_H,	352/330/803/ 793/743/743/ 902/352/366	0 ~ 2047	015/016 Read only
19	SYNC_OUT_DELAY_H,	500/512/941/ 937/772/772/ 1098/492/523	0 ~ 2047	017/018 Read only
20	SYNC_OUT_DELAY_V,	50/65/102/100/83/47/54/50/65	0 ~ 2047	019/020 Read only
21	IMAGE_OUT_START_H,	0	0	0 Fixed
22	IMAGE_OUT_END_H,	2047	2047	2047 Fixed
23	IMAGE_OUT_START_V,	0/0/0/0/ 0/0/0/0/0	0 ~ 2047	025/026
24	IMAGE_OUT_END_V,	517/618/1038/ 1250/1119/1119/ 1490/517/618	0 ~ 2047	027/028
25	G_Y_IN_OS,	0	0 ~ 255	029(reg 1)fixed
26	B_CB_IN_OS,	0	0 ~ 255	030
27	R_CR_IN_OS,	0	0 ~ 255	031
28	G2Y,	150/183	0 ~ 1023	032/033 (reg 2)NTSC,PAL,480p,575p / 1035i,1080i,1080i50,720p
29	B2Y,	29/19	0 ~ 1023	034/035
30	R2Y,	77/54	0 ~ 1023	036/037
31	G2CB,	939/925	0 ~ 1023	038/039
32	B2CB,	128/128	0 ~ 1023	040/041
33	R2CB,	981/995	0 ~ 1023	042/043
34	G2CR,	917/908	0 ~ 1023	044/045
35	B2CR,	1003/1012	0 ~ 1023	046/047
36	R2CR,	128/128	0 ~ 1023	048/049
37	HUE_M,	37/35	0 ~ 255	050
38	GAIN_M,	0/0	0 ~ 127	051
39	DG_M_R,	0/0	0 ~ 63	052
40	HUE_R,	77/73	0 ~ 255	053
41	GAIN_R,	0/0	0 ~ 127	054
42	DG_R_Y,	0/0	0 ~ 63	055
43	HUE_Y,	121/124	0 ~ 255	056
44	GAIN_Y,	0/0	0 ~ 127	057
45	DG_Y_G,	0/0	0 ~ 63	058
46	HUE_G,	165/163	0 ~ 255	059
47	GAIN_G,	0/0	0 ~ 127	060
48	DG_G_C,	0/0	0 ~ 63	061
49	HUE_C,	205/201	0 ~ 255	062
50	GAIN_C,	0/0	0 ~ 127	063
51	DG_C_B,	0/0	0 ~ 63	064
52	HUE_B,	249/	0 ~ 255	065
53	GAIN_B,	0/0	0 ~ 127	066
54	DG_B_M,	0/0	0 ~ 63	067
55	DNR_Y_NOISE_TH,	8/8	0 ~ 127	068 (reg 3)DNR-OFF / DNR-ON
56	DNR_Y_SENSE,	0/6	0 ~ 15	069
57	DNR_Y_MOTION_TH,	0/0	0 ~ 127	070
58	DNR_Y_MOTION_SLOPE,	4/4	0 ~ 7	071
59	DNR_Y_MOTION_F2_F0,	0/0	0 ~ 3	072
60	DNR_Y_MOTION_F4_F2,	3/3	0 ~ 3	073
61	DNR_C_NOISE_TH,	8/8	0 ~ 127	074
62	DNR_C_SENSE,	0/6	0 ~ 15	075
63	DNR_C_MOTION_TH,	0/0	0 ~ 127	076
64	DNR_C_MOTION_SLOPE,	4/4	0 ~ 7	077
65	DNR_C_MOTION_F2_F0,	0/0	0 ~ 3	078
66	DNR_C_MOTION_F4_F2,	3/3	0 ~ 3	079
67	IP_DEBUG,	0/0/0	0 ~ 7	080 (reg 4)IP-ON=NTSC,PAL,1035i,1080i,1080i50 / 720p,480p,575p / IP-OFF
68	IP_CTL_Y,	0/1/1	0 or 1	081-1
69	IP_CTL_C,	1/1/1	0 or 1	081-0
70	IP_DIR,	10/0/0	0 ~ 15	082 (reg 5)IP-ON=NTSC,PAL /IP-ON=720p,480p,575p,1035i,1080i,1080i50 / IP-OFF
71	IP_VAR_GAI,	8/0/0	0 ~ 15	083
72	IP_BPF_CORR,	4/0/0	0 ~ 255	084
73	IP_BPF_GAIN,	32/0/0	0 ~ 63	085
74	IP_REL_H_GAIN,	63/0/0	0 ~ 63	086
75	IP_REL_V_GAIN,	63/0/0	0 ~ 63	087
76	MOTION_LPF_SEL,	7/7/7/7/7/7/7/7	0 ~ 7	088 (reg 6)DNR-ON=NTSC,PAL/DNR-OFF=NTSC,PAL/1035i,1080i,1080i50/720p,480p,575p
77	MOTION_TH_MIN,	8/8/8/8/22/22/22/22	0 ~ 255	089 /L2&&DNR-ON =NT,PAL/L2&&DNR-OFF=NT,PAL/L2=1035i,1080i,1080i50/L2=720p,480p,575p
78	MOTION_TH_MAX,	16/16/16/16/38/38/38/38	0 ~ 255	090

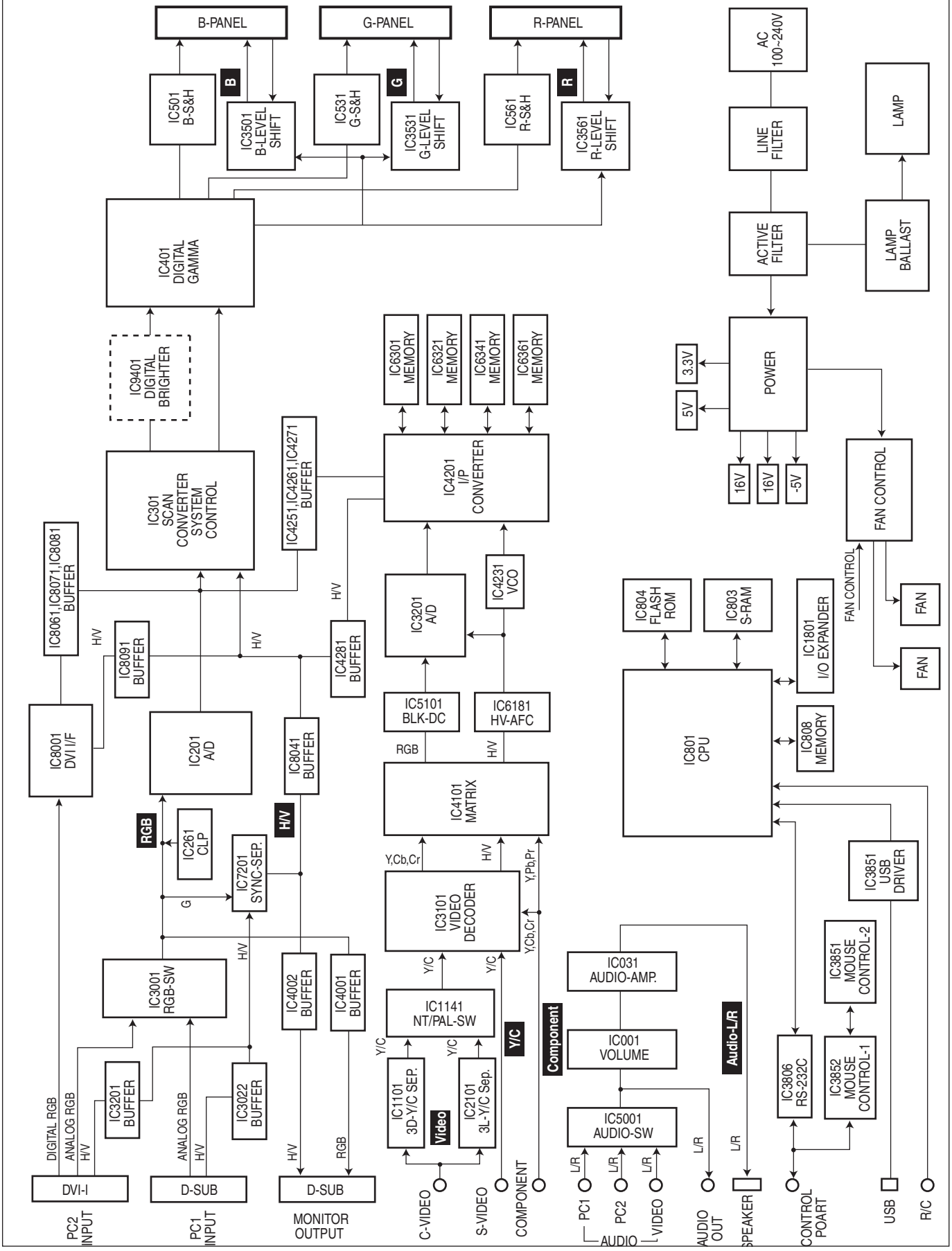
No.	Adjustment Item	Initial Value	Range	Input source / Description
79	MOTION_TH_DL,	8/12/8/8/8/12/8/8	0 ~ 255	091
80	MOTION_WEIGHT_0,	9/9/9/9/9/9/9/9	0 ~ 15	092
81	MOTION_WEIGHT_1,	8/8/8/8/8/8/8/8	0 ~ 15	093
82	MOTION_WEIGHT_2,	7/7/7/7/7/7/7/7	0 ~ 15	094
83	MOTION_WEIGHT_3,	6/6/6/6/6/6/6/6	0 ~ 15	095
84	MOTION_WEIGHT_4,	5/5/5/5/5/5/5/5	0 ~ 15	096
85	MOTION_WEIGHT_5,	4/4/4/4/4/4/4/4	0 ~ 15	097
86	MOTION_WEIGHT_6,	3/3/3/3/3/3/3/3	0 ~ 15	098
87	MOTION_WEIGHT_7,	2/2/2/2/2/2/2/2	0 ~ 15	099
88	MOTION_WEIGHT_8,	1/1/1/1/1/1/1/1	0 ~ 15	100
89	MOTION_SUM_0,	20/20/0/0/20/20/0/0	0 ~ 1023	101
90	MOTION_SUM_1,	32/32/9/9/32/32/9/9	0 ~ 1023	103
91	MOTION_SUM_2,	86/86/0/0/86/86/0/0	0 ~ 1023	105
92	MOTION_SUM_3,	110/110/63/63/110/110/63/63	0 ~ 1023	107
93	PEAK_V_LPF_SEL,	1	0 or 1	109 (reg 7)fix
94	PEAK_V_CORR,	4	0 ~ 255	110
95	PEAK_V_GAIN,	6	0 ~ 63	111
96	PEAK_V_GAIN_TH,	0	0 ~ 255	112
97	PEAK_V_GAIN_SLOPE,	0	0 ~ 7	113
98	PEAK_V_MAX,	255	0 ~ 255	114
99	TI_Y_TH_MIN,	0	0 ~ 255	115
100	TI_Y_TH_MAX,	0	0 ~ 255	116
101	TI_Y_CORR,	0	0 ~ 255	117
102	TI_Y_GAIN,	0	0 ~ 63	118
103	TI_Y_GAIN_TH,	0	0 ~ 255	119
104	TI_Y_GAIN_SLOPE,	0	0 ~ 7	120
105	TI_Y_GAIN_SEL,	0	0 ~ 7	121
106	TI_C_TH_MIN,	0	0 ~ 255	122
107	TI_C_TH_MAX,	0	0 ~ 255	123
108	TI_C_CORR,	0	0 ~ 255	124
109	TI_C_GAIN,	0	0 ~ 63	125
110	TI_C_GAIN_TH,	0	0 ~ 255	126
111	TI_C_GAIN_SLOPE,	0	0 ~ 7	127
112	TI_C_GAIN_SEL,	0	0 ~ 7	128
113	PEAK_H_BPF_SEL,	2/0	0 ~ 3	129(reg 8)NTSC,PAL / except NT,PAL
114	PEAK_H_CORR,	4/4	0 ~ 255	130
115	PEAK_H_GAIN,	6/0	0 ~ 63	131
116	PEAK_H_GAIN_TH,	0/0	0 ~ 255	132
117	PEAK_H_GAIN_SLOPE,	3/0	0 ~ 7	133
118	PEAK_H_GAIN_SEL,	1/0	0 ~ 3	134
119	PEAK_H_MAX,	255/255	0 ~ 255	135
120	Y2G,	256/256	0 ~ 1023	136/137(reg 9)NTSC,PAL,480p,575p / 1035i,1080i,1080i50,720p
121	CB2G,	936/976	0 ~ 1023	138/139
122	CR2G,	841/904	0 ~ 1023	140/141
123	Y2B,	256/256	0 ~ 1023	142/143
124	CB2B,	454/475	0 ~ 1023	144/145
125	CR2B,	0/0	0 ~ 1023	146/147
126	Y2R,	256/256	0 ~ 1023	148/149
127	CB2R,	0/0	0 ~ 1023	150/151
128	CR2R,	359/403	0 ~ 1023	152/153
129	G_Y_OUT_OS,	0	0 ~ 255	154 (reg A)fixed
130	G_Y_OUT_MIN,	0	0 ~ 255	155
131	G_Y_OUT_DC,	16	0 ~ 255	156
132	G_Y_OUT_MAX,	255	0 ~ 255	157
133	B_CB_OUT_OS,	0	0 ~ 255	158
134	B_CB_OUT_MIN,	0	0 ~ 255	159
135	B_CB_OUT_DC,	16	0 ~ 255	160
136	B_CB_OUT_MAX,	255	0 ~ 255	161
137	R_CR_OUT_OS,	0	0 ~ 255	162
138	R_CR_OUT_MIN,	0	0 ~ 255	163
139	R_CR_OUT_DC,	16	0 ~ 255	164
140	R_CR_OUT_MAX,	255	0 ~ 255	165
141	CINEMA_START_H,	0/0/0	0 ~ 255	166 (reg B)IP-ON=NTSC /except IP-ON=NT / IP-OFF
142	CINEMA_SIZE_H,	160/0/0	0 ~ 255	167
143	CINEMA_START_V,	1/0/0	0 ~ 255	168
144	CINEMA_SIZE_V,	60/0/0	0 ~ 255	169
145	CINEMA_MOTION_TH,	16/0/0	0 ~ 255	170:limited value is 10 (cinema identify sense)
146	CINEMA_DET_TH,	384/0/0	0 ~ 65535	171:1024 limited value
147	CINEMA_DET_FIELD,	7/0/0	0 ~ 7	173
148	CINEMA_CTL_SWAP,	20/0/0	0 ~ 31	174
149	CINEMA_CTL_Y,	0/1/1	0 or 1	175-1
150	CINEMA_CTL_C,	1/1/1	0 or 1	175-0
151	EXT_CINEMA_DET,	0/0/0	0 or 1	176-2
152	EXT_CINEMA_MODE,	0/0/0	0 or 1	176-1
153	EXT_CINEMA_SWAP,	0/0/0	0 or 1	176-0
Group: 21 MB40C348				
0	v_amp	1	0 or 1	adr0-2
1	dsel	1	0 or 1	adr0-1
2	ce	0	0 or 1	adr0-0
3	counter_w	64	0 ~4095	adr1,adr2(3-0)
4	adc_out	0	0 or 1	adr3-7
5	hsync_pol	1	0 or 1	adr3-6
6	clk_delay	0	0 ~ 63	adr3(5-0)

No.	Adjustment Item	Initial Value	Range	Input source / Description
7	dsync_delay	1	0 ~ 3	adr4(7-6)
8	adclk_b	1	0 or 1	adr4-5
9	adclk_a	1	0 or 1	adr4-4
10	dsync_b	1	0 or 1	adr4-3
11	dsync	1	0 or 1	adr4-2
12	clk_b	1	0 or 1	adr4-1
13	clk	1	0 or 1	adr4-0
14	divider	0	0 ~ 3	adr5(7-6)
15	vco_chg	0	0 or 1	adr5-5
16	current	0	0 or 3	adr5(4-3)
17	counter	1	0 or 1	adr5-2
18	out_clk	0	0 or 1	adr5-1
19	clk_chb	1	0 or 1	adr5-0
Group: 22 ICS_data				
0	ICS_R0_EnDLS	0	0 ~ 1	R0
1	ICS_R0_EnPLS	1	0 ~ 1	NTSC & 480i / PAL & SECAM & 525i / 1035i & 1080i60 & 1080i50 / 720P & 480P & 575P
2	ICS_R0_Func_Sel	0	0 ~ 1	(Same data vale except R1)
3	ICS_R0_Fbk_Sel	0	0 ~ 1	
4	ICS_R0_Fbk_Pol	0	0 ~ 1	
5	ICS_R0_Ref_Pol	1	0 ~ 1	
6	ICS_R0_PD_Pol	1	0 ~ 1	
7	ICS_R0_Pden	0/1	0 ~ 1	others/1080i-50
8	ICS_R1_PSD	2/2/0/2/0 0/0/0/2/0	0 ~3	R1 (front half: Progressive on, last half: through) XGA output at all
9	ICS_R1_PFD	6/6/5/7/5 5/5/5/7/5	0 ~7	NTSC & 480i / PAL & SECAM & 525i / 1035i & 1080i60 / 1080i50 / 720P & 480P & 575P
10	ICS_R3_FBD	4095	0 ~8191	R3_R2 NTSC & 480i / PAL & SECAM & 525i / 1035i & 1080i60 & 1080i50 / 720P & 480P & 575P
11	ICS_R4_Fil_Sel	0	0 ~ 1	R4
12	ICS_R4_DPA_OS	0	0 ~ 63	NTSC & 480i / PAL & SECAM & 525i / 1035i & 1080i60 & 1080i50 / 720P & 480P & 575P
13	ICS_R5_Mask_Rev	0	0 ~ 63	R5
14	ICS_R5_DPA_Res	0	0 ~ 3	NTSC & 480i / PAL & SECAM & 525i / 1035i & 1080i60 & 1080i50 / 720P & 480P & 575P
15	ICS_R6_Out_Scl	3	0 ~3	R6
16	ICS_R6_Ck2_Inv	1	0 ~ 1	NTSC & 480i / PAL & SECAM & 525i / 1035i & 1080i60 & 1080i50 / 720P & 480P & 575P
17	ICS_R6_OE_F	1	0 ~ 1	
18	ICS_R6_OE_T2	1	0 ~ 1	
19	ICS_R6_OE_P2	1	0 ~ 1	
20	ICS_R6_OE_Tck	1	0 ~ 1	
21	ICS_R6_OE_Pck	1	0 ~ 1	
22	ICS_R7_In_Sel	0	0 ~ 1	R7
23	ICS_R7_Osc_Div	0	0 ~ 127	NTSC & 480i / PAL & SECAM & 525i / 1035i & 1080i60 & 1080i50 / 720P & 480P & 575P
24	ICS_R8_PLL	0	0 ~ 15	R8
25	ICS_R8_DPA	10	0 ~ 15	NTSC & 480i / PAL & SECAM & 525i / 1035i & 1080i60 & 1080i50 / 720P & 480P & 575P
Group: 500 ADC				
0	ADC R-OFFSET	96	0 ~ 255	
1	ADC G-OFFSET	96	0 ~ 255	
2	ADC B-OFFSET	96	0 ~ 255	Stored by SH2, controlled by PW
3	ADC R-GAIN	220	0 ~ 255	
4	ADC G-GAIN	220	0 ~ 255	
5	ADC B-GAIN	220	0 ~ 255	
6	ADC BandWidth PC	3	0 ~ 3	
7	ADC BandWidth AV	3	0 ~ 3	
Group: 510 NTSC Gakaku				
0	NTSC TOTAL DOTS	1312	0 ~ 2048	
1	NTSC DISP DOTS	999	0 ~ 2048	NT
2	NTSC H BACK PORCTH	499	0 ~ 2048	Stored by SH2, controlled by PW
3	NTSC V BACK PORCTH	41	0 ~ 2048	
4	NTSC DISP LINE	458	0 ~ 2048	
5	NTSC CLAMP	0	0 ~ 2048	
Group: 511 PAL Gakaku				
0	PAL TOTAL DOTS	1347	0 ~ 2048	
1	PAL DISP DOTS	999	0 ~ 2048	PAL
2	PAL H BACK PORCTH	512	0 ~ 2048	Stored by SH2, controlled by PW
3	PAL V BACK PORCTH	41	0 ~ 2048	
4	PAL DISP LINE	534	0 ~ 2048	
5	PAL CLAMP	0	0 ~ 2048	
Group: 512 HDTV 1080i-60 Gakaku				
0	TOTAL DOTS	1204	0 ~ 2048	
1	DISP DOTS	999	0 ~ 2048	1080i60
2	H BACK PORCTH	772	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	47	0 ~ 2048	
4	DISP LINE	1051	0 ~ 2048	
5	CLAMP	7	0 ~ 2048	
Group: 513 HDTV 1080i-50 Gakaku				
0	TOTAL DOTS	1444	0 ~ 2048	
1	DISP DOTS	999	0 ~ 2048	1080i50
2	H BACK PORCTH	890	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	56	0 ~ 2048	
4	DISP LINE	1044	0 ~ 2048	
5	CLAMP	7	0 ~ 2048	
Group: 514 HDTV 1035i Gakaku				
0	TOTAL DOTS	1204	0 ~ 2048	
1	DISP DOTS	999	0 ~ 2048	1035i
2	H BACK PORCTH	772	0 ~ 2048	Stored by SH2, controlled by PW

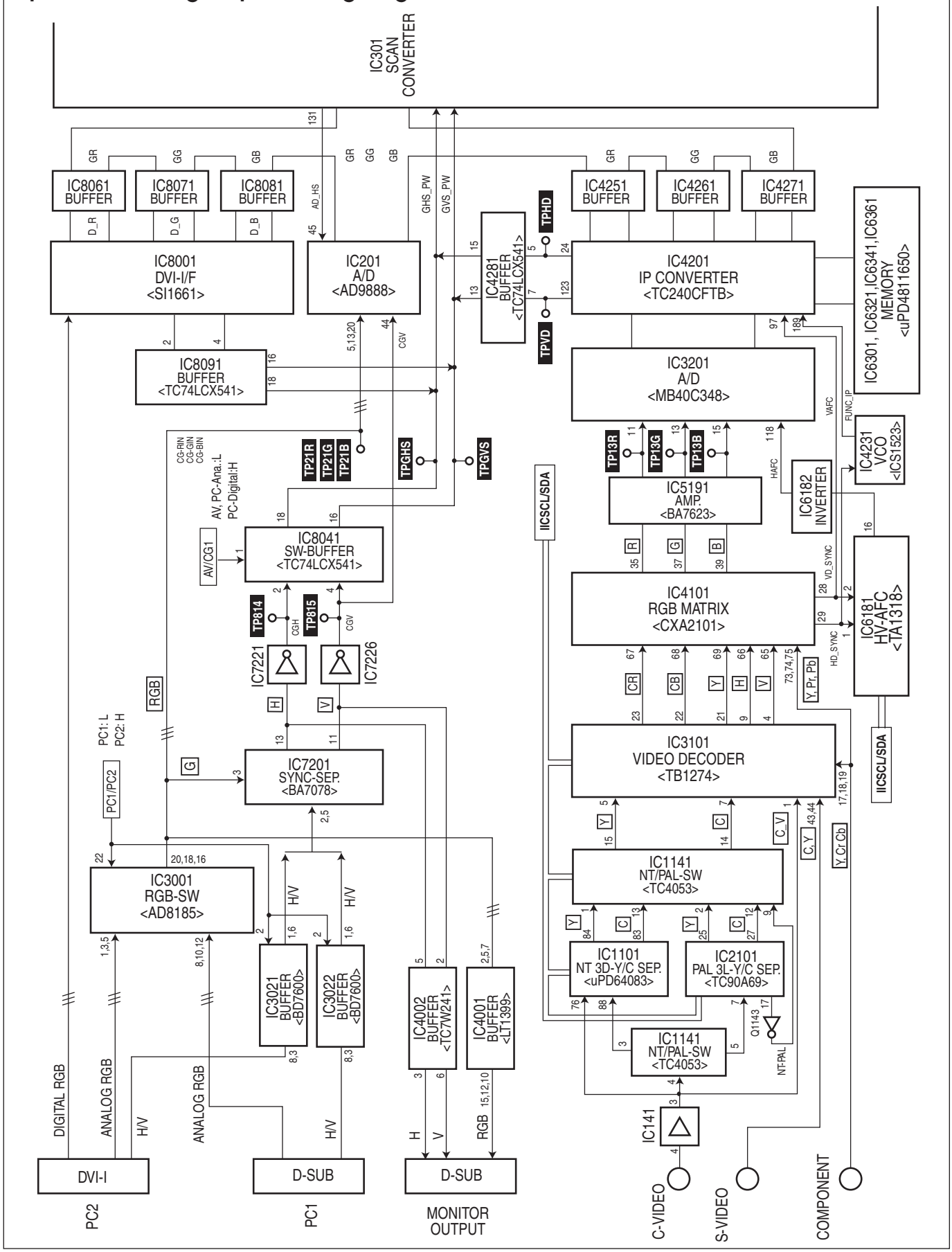
No.	Adjustment Item	Initial Value	Range	Input source / Description
3	V BACK PORCTH	83	0 ~ 2048	
4	DISP LINE	1012	0 ~ 2048	
5	CLAMP	7	0 ~ 2048	
Group: 515 HDTV 720p Gakaku				
0	TOTAL DOTS	1524	0 ~ 2048	
1	DISP DOTS	1154	0 ~ 2048	720p
2	H BACK PORCTH	1098	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	54	0 ~ 2048	
4	DISP LINE	702	0 ~ 2048	
5	CLAMP	8	0 ~ 2048	
Group: 516 HDTV 575p Gakaku				
0	TOTAL DOTS	1308	0 ~ 2048	
1	DISP DOTS	1364	0 ~ 2048	575p
2	H BACK PORCTH	937	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	100	0 ~ 2048	
4	DISP LINE	536	0 ~ 2048	
5	CLAMP	8	0 ~ 2048	
Group: 517 HDTV 480p Gakaku				
0	TOTAL DOTS	1326	0 ~ 2048	
1	DISP DOTS	1364	0 ~ 2048	480p (memory 6 top, bottom, left and right)
2	H BACK PORCTH	941	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	102	0 ~ 2048	
4	DISP LINE	440	0 ~ 2048	
5	CLAMP	7	0 ~ 2048	
Group: 518 RGB NTSC Gakaku				
0	TOTAL DOTS	1312	0 ~ 2048	
1	DISP DOTS	1024	0 ~ 2048	RGB NTSC
2	H BACK PORCTH	224	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	44	0 ~ 2048	
4	DISP LINE	457	0 ~ 2048	
5	CLAMP	4	0 ~ 2048	
Group: 519 RGB PAL Gakaku				
0	TOTAL DOTS	1348	0 ~ 2048	
1	DISP DOTS	1024	0 ~ 2048	RGB PAL
2	H BACK PORCTH	258	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	60	0 ~ 2048	
4	DISP LINE	536	0 ~ 2048	
5	CLAMP	4	0 ~ 2048	
Group: 520 RGB 1080i-60 Gakaku				
0	TOTAL DOTS	1610	0 ~ 2048	
1	DISP DOTS	1372	0 ~ 2048	RGB 1080i-60
2	H BACK PORCTH	186	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	52	0 ~ 2048	
4	DISP LINE	1052	0 ~ 2048	
5	CLAMP	7	0 ~ 2048	
Group: 521 RGB 1080i-50 Gakaku				
0	TOTAL DOTS	1934	0 ~ 2048	
1	DISP DOTS	1372	0 ~ 2048	RGB 1080i-50
2	H BACK PORCTH	188	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	53	0 ~ 2048	
4	DISP LINE	1052	0 ~ 2048	
5	CLAMP	7	0 ~ 2048	
Group: 522 RGB 1035i Gakaku				
0	TOTAL DOTS	1604	0 ~ 2048	
1	DISP DOTS	1366	0 ~ 2048	RGB 1035i
2	H BACK PORCTH	186	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	87	0 ~ 2048	
4	DISP LINE	1014	0 ~ 2048	
5	CLAMP	7	0 ~ 2048	
Group: 523 SCART 575i Gakaku				
0	TOTAL DOTS	1356	0 ~ 2048	
1	DISP DOTS	999	0 ~ 2048	SCART 575i
2	H BACK PORCTH	523	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	64	0 ~ 2048	
4	DISP LINE	518	0 ~ 2048	
5	CLAMP	0	0 ~ 2048	
Group: 524 SCART 480i Gakaku				
0	TOTAL DOTS	1308	0 ~ 2048	
1	DISP DOTS	999	0 ~ 2048	SCART 480i
2	H BACK PORCTH	493	0 ~ 2048	Stored by SH2, controlled by PW
3	V BACK PORCTH	49	0 ~ 2048	
4	DISP LINE	440	0 ~ 2048	
5	CLAMP	0	0 ~ 2048	
Group: 550 Gakaku Option				
0	480i H Offset	248	0 ~ 255	H position fine adjustment at component
1	575i H Offset	11	0 ~ 255	Stored by SH2, controlled by PW

■ Chassis Block Diagrams

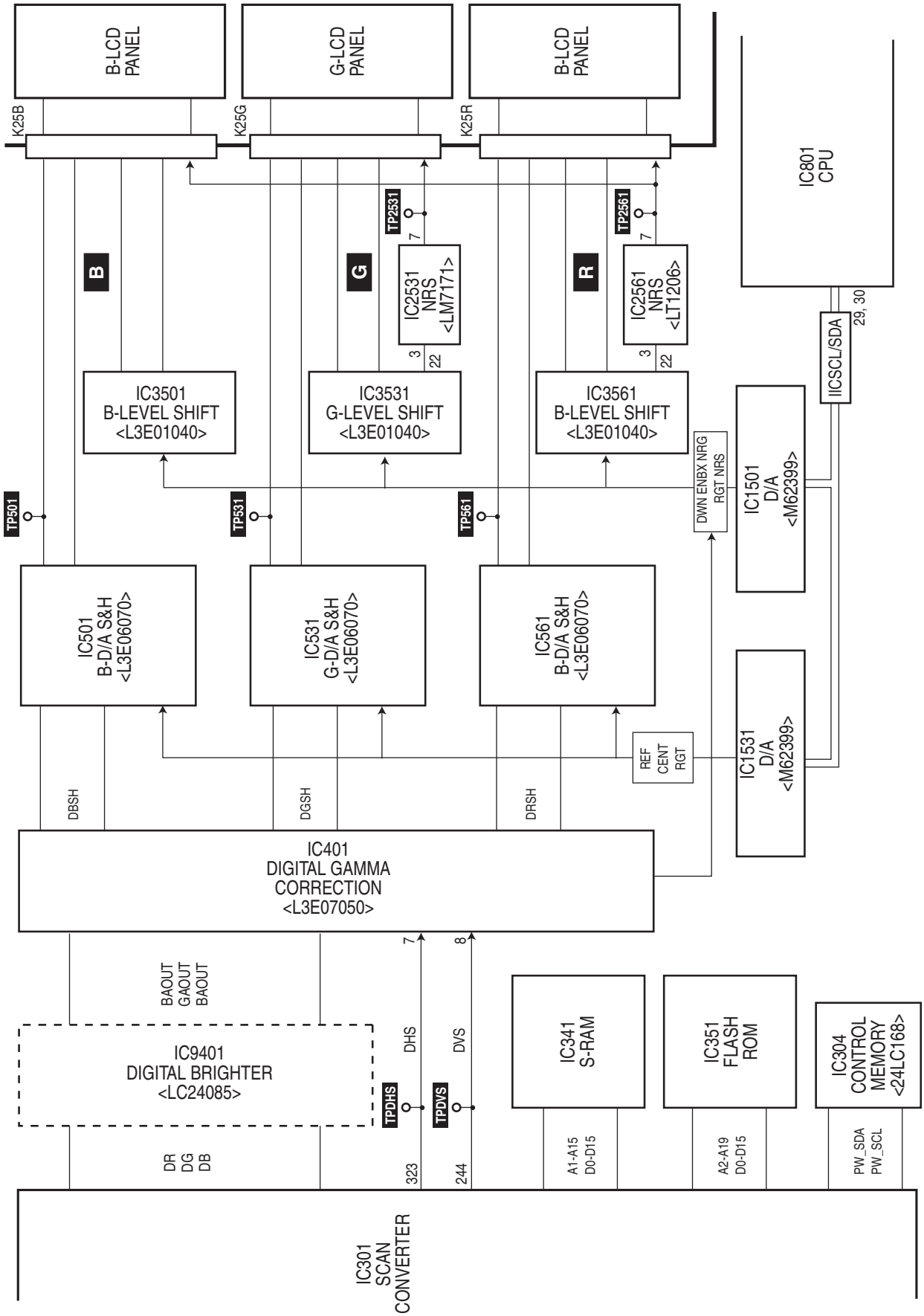
Chassis over view



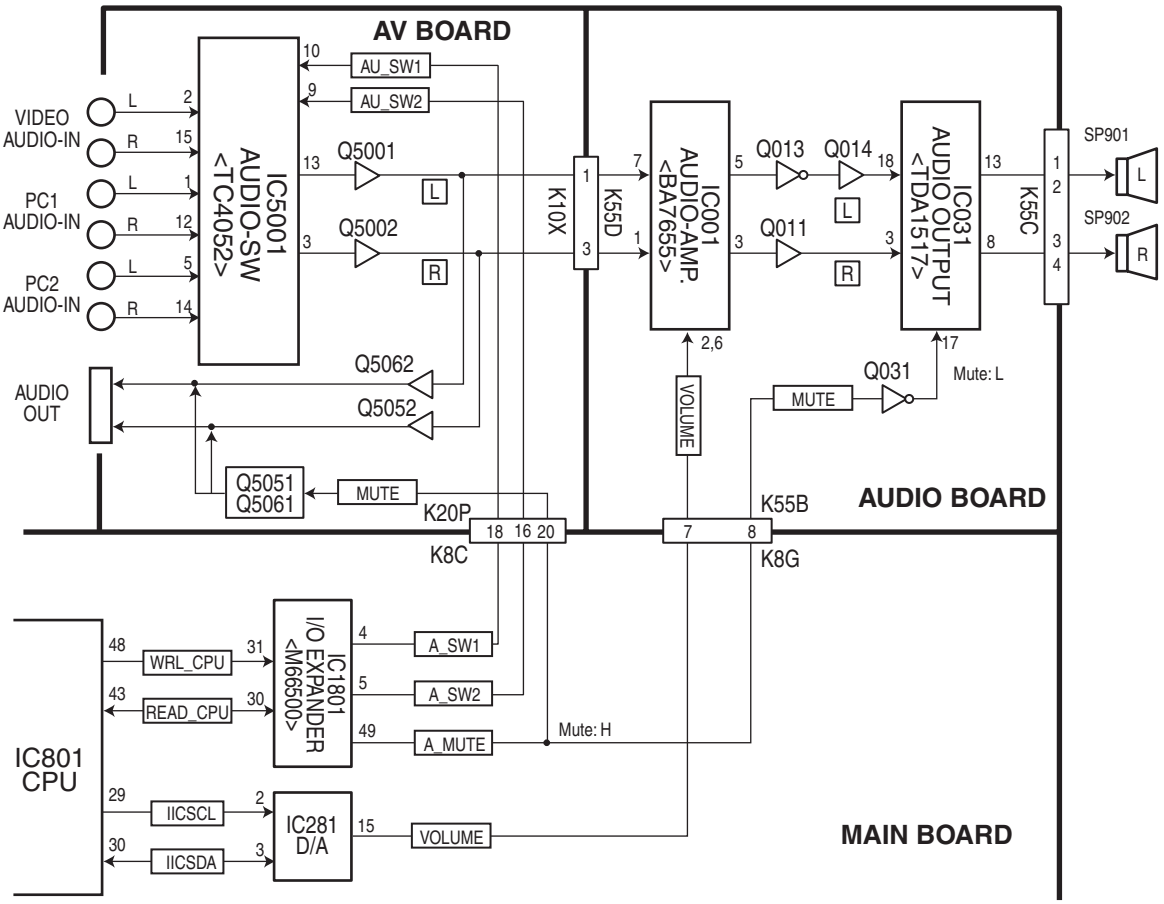
Inputs & video signal processing stage



LCD panel driving stage



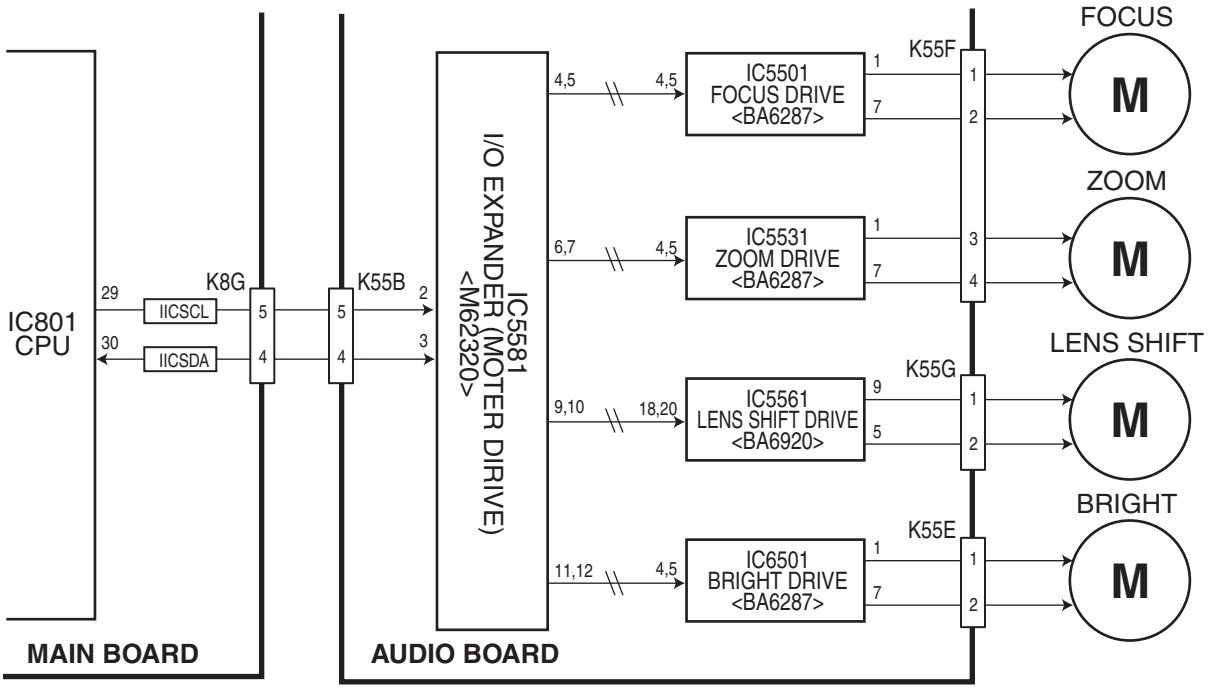
Audio signal processing circuit



AUDIO-SW Switching Logic

	PC1	PC2	VIDEO
A_SW1 (4), AU_SW 1(10)	L	H	L
A_SW2 (5), AU_SW2 (9)	L	L	H

Motor driving circuit



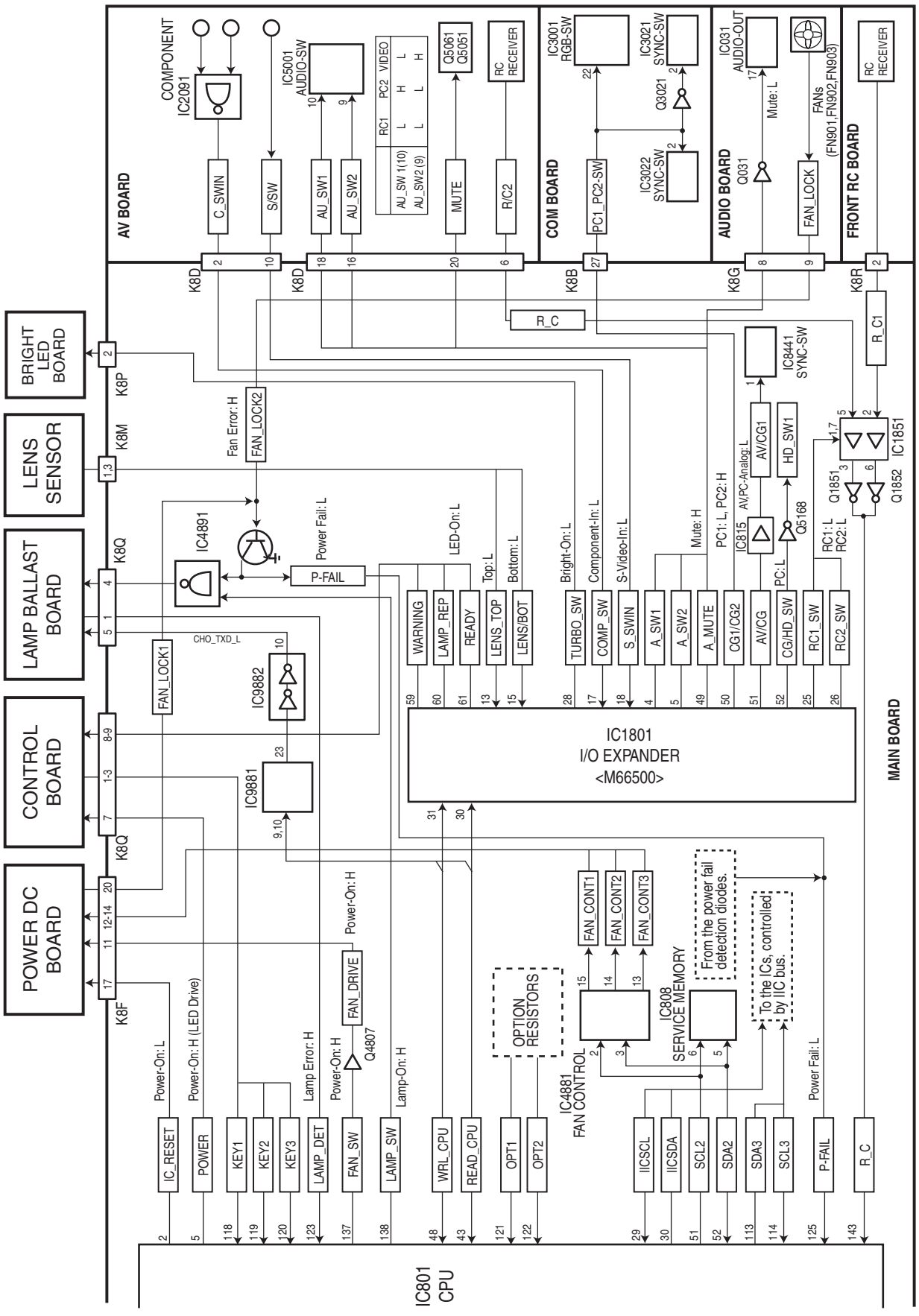
Logic Table of Drive ICs (IC5501,IC5531, IC6501)

Input		Output		Operation
4	5	7	1	
H	L	L	H	Forward drive
L	H	H	L	Reverse drive
H	H	L	L	Braking Mode
L	L	Open	Open	Standby Mode

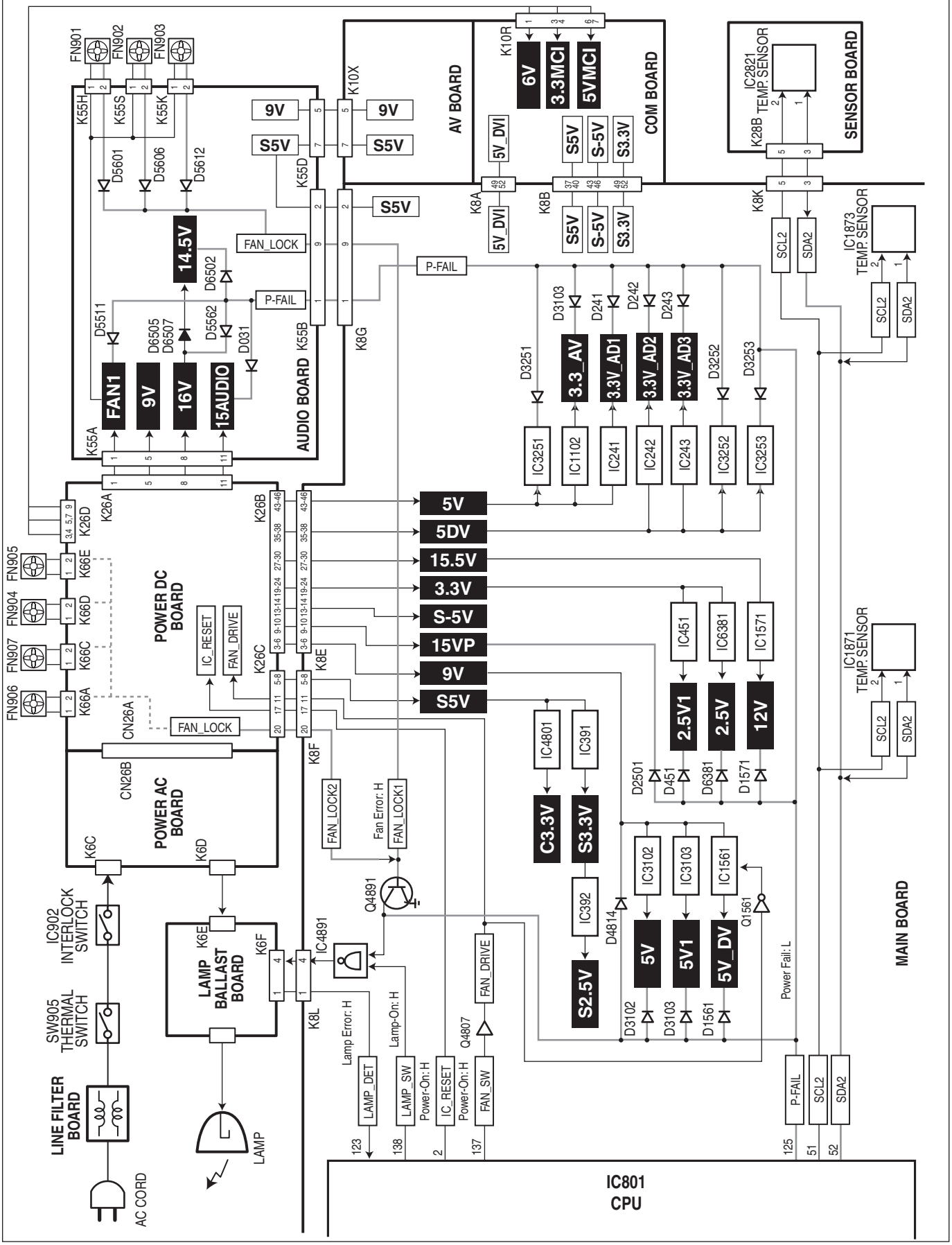
Logic Table of Drive ICs (IC5561)

Input		Output		Operation
18	20	5	9	
H	L	L	H	Forward drive
L	H	H	L	Reverse drive
H	H	L	L	Braking Mode
L	L	Open	Open	Standby Mode

System controls



Power supply & protection circuit



■ Troubleshooting

No Power

The possible causes of No Power are listed below. Please check following and refer to the chapter “Power supply and protection circuit” in the Chassis Block Diagrams on the previous page.

1. It does not operate the power supply circuit due to detection of abnormality.

- The abnormality on the secondary power supply lines was detected.
  One of the power failure detection diodes detects an abnormal voltage on the power supply. Check the shortage of secondary circuits, ICs, condensers, etc.
  Check power supply lines, FAN1, 16V, 14,5V and 15AUDIO on the Audio Board, and 5V, 5VD, 15.5V, 3.3V, 15VP, 9V, 5V1, 5V_DV, 2.5V1, 12V, 3.3_AV, 3.3V_AD1, 3.3V_AD2, 3.3V_AD3, 2.5V1 and 12V on the Main Board.
  Check detection diodes, D5511, D5562, D6502, D031 on the Audio Board, and D3102, D3103, D4814, D1561, D451, D1571, D2501, D6381, D3252, D3253, D241, D242, D243, D3103, D3251 on the Main Board.

- The cooling fans was stopped.
  One of the power failure detection diodes detects the fan operation stop (FAN_LOCK) signal. Check Fans FN901, FN902, FN903, FN904, FN905, FN906 and FN907.
  Check the FAN_LOCK signal.
  Fan Error : H
  And this signal drives Q4891 on and the P-FAIL signal becomes low.

- The abnormal temperature rise inside the projector was detected.
  Temperature sensor ICs detect abnormal temperature. Check peripheral circuits and sensor ICs IC2821 on the Sensor Board, IC1871 , IC1872 and IC1873 on the Main Board.
  Thermal switch (SW905) detects abnormal temperature. Check peripheral circuits and SW905.
  SW905..... short in normal
  SW905 opens when peripheral temperature is over 90°C.

- The abnormality on the lamp ballast board was detected.
  The lamp ballast board outputs error signal (LAMP_DET) to pin 123 of IC801.
  LAMP_DET ..... High in abnormal

- The Interlock switch (SW902) is not turned on.
  Check lamp cover fixed correctly.

- Fuse was opened.
  Check the fuse on the Line Filter Board.

2. Abnormality occurs on drive signals for power or lamp circuit.

- Abnormality on power starter signals (FAN_DRIVE/ FAN_SW).
  The FAN_SW signal is output from pin 137 of IC801 and applied to power supply circuit through Q4807 as the name of FAN_DRIVE. It drives the fans on and off.
  FAN_DRIVE ..... High in power on
  Check FAN_DRIVE signal, IC801 and peripheral circuits.

- Abnormality on the drive signal (IC_RESET).
  The IC_RESET signal is output from pin 2 of IC801 and sent to the power DC board to switch the power on and off.
  IC_RESET High in power on
  Check IC_RESET signal, IC801 and peripheral circuits.

- Abnormality on the lamp drive signal (LAMP_SW).
  The LAMP_SW signal is output from pin 138 of IC801 and sent to IC4891. IC4891 also receives the P-FAIL signal and outputs the drive signal to pin 4 of K8L and the lamp ballast board.

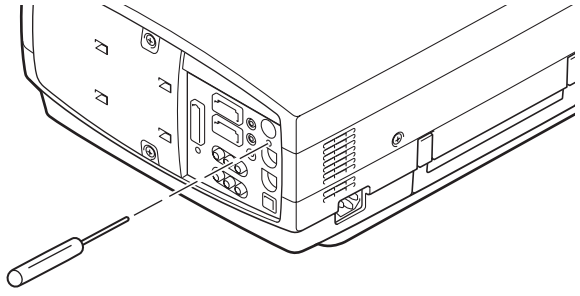
  LAMP_SW ..... High in power on
  Check LAMP_SW signal, IC801 and peripheral circuits.

3. Abnormality occurs on the power circuit.

- Abnormality on power primary circuit
  Check Line filters, thermal switch (SW905), interlock switch (SW902) the Power AC board and Power DC board.

Reset switch

The projector does not allow any controls rarely when the abnormality of power or operation occurs inside the projector. In this case, press the reset switch on the rear panel to restart the projector.



About the LED indicator flashing

The projector will be automatically turned off when the internal temperature of the projector exceeds the normal operating temperature, or the cooling fans stops, or the power supplies in the projector are failed.

- If the TEMP WARNING indicator (red) is flashing, it may detect the abnormal temperature inside the projector. Check the air filters and remove the object near the intake and exhaust fan openings, and wait until the WARNING TEMP indicator flashing stops, and then try to turn on the projector.
- If both of the TEMP WARNING (red) and READY (green) indicators are flashing at the same time, It may defect the cooling fans and power supply circuits. Check fan operation and power supply lines.

No Picture

The possible causes of No Picture are listed below. Please check following and refer to the chapter “Inputs & video signal processing stage”, “LCD panel driving stage” in the Chassis Block Diagrams on the previous page.

1. No picture from Video source

Composite Video Input

Check that the composite video signal is observed at the following points;

Pin 16 of K8D, pins 4, 3 of IC141, pin 4 of IC1141, pin 88 of IC1101 (NTSC), pin 7 of IC2101 (PAL) on the Main Board.

Check that the Y/C signals are observed at the following points;

Pins 83, 84 of IC1101, pins 1, 13 of IC1141(NTSC), pins 25, 27 of IC2101, pins 2 12 of IC1141 (PAL), pins 15, 14 of IC1141, pins 5, 7 of IC3101.

S-Video Input

Check that the Y/C signals are observed at the following points;

Pins 14 (Y), 12(C) of K20Q and K8D, pins 43, 44 of IC3101.

Component Input

Check that the component signals are observed at the following points;

Pins 4 (CR), 6 (CB), 8 (Y) on K20Q and K8D, pins 17, 18, 19 of IC3101, pins 73, 74, 75 of IC4101.

All of video signals

Check that the RGB signals are observed at the following points;

Pin 35, 37, 39 of IC4101, TP13R, TP13G, TP13B, pins 11, 13, 15 of IC3201.

Check that the SYNC signals are observed at the following points;

Pins 28, 29 of IC4101, pins 1, 2 of IC6181, test points TPVD, TPHD, pins 13, 15 , 7, 5 of IC4281.

2. No picture from Computer source

Check that the RGB signals are observed at the following points;

Pins 1, 3, 5 of IC3001 for Computer2 mode, pins 8, 10, 13 of IC3001 for Computer1 mode, pins 20, 18, 16 of IC3001, test points TP21R, TP21G, TP21B, pins 5, 13, 20 of IC201.

Check PC1/PC2 switching signal is correct. Computer1: Low, Computer2 High on pin 22 of IC3001.

Check that the SYNC signals are observed at the following points;

Pins 8, 3, 1, 6 of IC3021 and IC3022, pins 2, 5, 13, 11 of IC7201, test points TP814, TP815, pins 2, 4, 18, 16 of IC8041, test points THGHS, TPGVS, pins 34, 133 of IC301.

Check PC1/PC2 switching signal is correct. Computer1: Low, Computer2 High on pin 2 of IC3021 and IC3022.

3. No picture from DVI source.

Check 5V power supply(5VDVI) at pins 6 and 7 of K10R and K26D on the power DC board.

Check Sync signal at pins 2, 4, 16, 18 of IC8001.

Check ICs IC8001, IC8061, IC8071, IC8081 and peripheral circuits.

4. No picture from all of sources

Check RGB S&H signals at test points TP501, TP531, and TP561.

Check that the SYNC signals are observed at test point TPDHS and TPDVS, pins 7 and 8 of IC401.

Check NRS signal at test point TP2531, TP2561.

Check power supply circuit 15.5V and 15VP and peripheral circuit.

Check ICs IC501, IC531, IC561, IC3501, IC3531, IC3561, IC2531, IC2561, IC401 and peripheral circuits.

No Sound

Please check following and refer to the chapter “Audio signal processing circuit” in the Chassis Block Diagrams on the previous page.

1. No audio signals at AV input circuit.

Check audio signals at pins 1, 12 (Computer1), 5, 14 (Computer2) and 2, 15 (Video) of IC5001 on AV Board.
Check IC5001 and peripheral circuits.

2. Incorrect operation of Input mode switching.

Check AU_SW1 and AU_SW2 switching signals at pins 9 and 10 of IC5001 on the AV board. The AU_SW1 and AU_SW2 signals are output from pins 4 and 5 of IC1801 as the name of A_SW1 and A_SW2. See the truth table below for input mode selection on the block diagram.

3. No audio output signal at speakers.

Check audio signals at pins 13 and 8 of IC031 on the audio board.
Check MUTE signal at pin 17 of IC031. Mute On: Low
The MUTE signal is output from pin 49 of IC1801.
Mute On : High
Check sound volume signal at pin 2, 6 of IC001.
The VOLUME signal is output from pin 15 of IC281 and it is controlled by IC801 via the IIC bus.
Volume Min.: Low
Check audio signals at IC001, IC031 and peripheral circuits.

4. No power supply at audio circuit.

Check 15V(15VAUDIO) power supply line.

Lens Motor Problems

Please check following and refer to the chapter “Motor driving circuit” in the Chassis Block Diagrams on the previous page.

1. No drive signals supplied at motors

Check drive signals at pins 1 and 2 of K55F for focus motor, pins 3 and 4 of K55F for zoom motor and pins 1 and 2 of K55G for lens shift motor, pins 1 and 2 of K55E for bright motor on the Audio board.
Check drive signals at pins 1 and 7 of each IC, IC5501, IC5531 and IC6501.Check drive signals at pins 9 and 5 of IC5561, Lens Shift.
Check IC5501, IC5531, IC5561 and IC6501 and peripheral circuits. Check motor drive power supply (9V and 16V).

2. No drive signals supplied at motor drive ICs.

Check drive signals at pins 4 and 5 of ICs IC5501, IC5531, and IC6501, at pin 18, 20 of IC5561. They are supplied from pins 4 and 5 for focus drive, pins 6 and 7 for zoom drive and pins 9 and 10 for lens shift drive, pins 11 and 12 for bright drive of IC15581 I/O control IC.

3. No drive signals output from CPU.

The motor dive signals are supplied from IC801, main CPU, via the IIC bus control lines on pins 29 and 30.

4. No key switch signals input to CPU.

Check signals at pins 118 to 120 of IC801 when pressing the key buttons. Check key buttons.

■ Control Port Functions

● System Control & I/O Port Table (IC801)

No.	Name	Function Name	Function	Polarity	I/O
1	PA23/WRHH	USB RESET	USB reset signal	Active L	O
2	PE14/TIOC4C/DACK0/AH	IC RESET	Power Control w/o FAN and LAMP	Active L	O
3	PA22/WRHL	SEPA_RESET	Reset output for M66230	L: Reset	O
4	PA21/CASHH		Not used		O
5	PE15/TIOC4D/DACK1/IRQOUT	POWER SW	Power LED drive	L:Power OFFH:Power ON	O
6	VSS	GND	-	-	-
7	PC0/A0	ADDRESS0	Address Bus 0	-	O
8	PC1/A1	ADDRESS1	Address Bus 1	-	O
9	PC2/A2	ADDRESS2	Address Bus 2	-	O
10	PC3/A3	ADDRESS3	Address Bus 3	-	O
11	PC4/A4	ADDRESS4	Address Bus 4	-	O
12	VCC	5V	-	-	-
13	PC5/A5	ADDRESS5	Address Bus 5	-	O
14	VSS	GND	-	-	-
15	PC6/A6	ADDRESS6	Address Bus 6	-	O
16	PC7/A7	ADDRESS7	Address Bus 7	-	O
17	PC8/A8	ADDRESS8	Address Bus 8	-	O
18	PC9/A9	ADDRESS9	Address Bus 9	-	O
19	PC10/A10	ADDRESS10	Address Bus 10	-	O
20	PC11/A11	ADDRESS11	Address Bus 11	-	O
21	PC12/A12	ADDRESS12	Address Bus 12	-	O
22	PC13/A13	ADDRESS13	Address Bus 13	-	O
23	PC14/A14	ADDRESS14	Address Bus 14	-	O
24	PC15/A15	ADDRESS15	Address Bus 15	-	O
25	PB0/A16	ADDRESS16	Address Bus 16	-	O
26	VCC	5V	-	-	-
27	PB1/A17	ADDRESS17	Address Bus 17	-	O
28	VSS	GND	-	-	-
29	PA20/CASHL	SCL 1	IIC Bus 1 SCL	Active L	I/O
30	PA19/BACK/DRAK1	SDA 1	IIC Bus 1 SDA	Active L	I/O
31	PB2/IRQ0/POE0/RAS		Not used	L fixed	
32	PB3/IRQ1/POE1/CASL	ET7050SELECT	Switch color shading correction on/off	On=L , Off=H	O
33	PA18/BREQ/DRAK0	SYS SW	Power switch for peripheral Ics	ON=L, OFF=H	O
34	PB4/IRQ2/POE2/CASH	AFT-V	Not used	(Not used)	I
35	VSS	GND		-	-
36	PB5/IRQ3/POE3/RDWR	DE_DIF	Not used	(Not used)	I
37	PB6/IRQ4/A18/BACK	ADDRESS18	Address Bus 18	-	O
38	PB7/IRQ5/A19/BREQ	ADDRESS19	Address Bus 19	-	O
39	PB8/IRQ6/A20/WAIT	ADDRESS20	Address Bus 20	-	O
40	VCC	5V	-	-	-
41	PB9/IRQ7/A21/ADTRG	ADDRESS21	Address Bus 21	-	O
42	VSS	GND	-	-	-
43	PA14/RD	READ	Read signal	Active L	O
44	WDTOVF	WDT	Not used	Not used	O
45	PD31/D31/ADTRG	RTS	RS232C RTS (Request To Send)	Not used	I
46	PD30/D30/IRQOUT	CTS	RS232C CTS (Clear To Send)	Not used	O
47	PA13/WRH	WRH	Write signal(bit8~15)	Active L	O
48	PA12/WRL	WRL	Write signal(Lowest 8bit 0~7)	Active L	O
49	PA11/CS1	SRAM_CS	SRAM_CS	Active L	O
50	PA10/CS0	CS0	Flash Memory Chip Select	Active L	O
51	PA9/TCLKD/IRQ3	SCL 2	IIC Bus 2 SCL	Active L	I/O
52	PA8/TCLKC/IRQ2	SDA 2	IIC Bus 2 SDA	Active L	I/O
53	PA7/TCLKB/CS3	CS3	USB / IP / IO EXP / Bright Chip Select	Active L	O
54	PA6/TCLKA/CS2	CS2	M66230 Chip Select	Active L	O
55	VSS	GND	-	-	-
56	PD29/D29/CS3	IPOUT_CPU	Enable/Disable the output from IP	AV:L other than AVH	O
57	PD28/D28/CS2	PW_SEL	PW365 RS232C Select	L:PWH:SH	O
58	PD27/D27/DACK1	PW_INTR	Not used	Not used	O
59	PD26/D26/DACK0	PW_OUT1	Not used	Reserved	O
60	PD25/D25/DREQ1	PW_OUT0	Not used	Reserved	O
61	VSS	GND	-	-	-
62	PD24/D24/DREQ0	SCART_SW	Scart switch(GBLKSPL stop)	Not used	O
63	VCC	5V	-	-	-
64	PD23/D23/IRQ7	RESET_CPU	Reset output for IP		O
65	PD22/D22/IRQ6	DVI_OUT		DVI: L DVIà»äO:H	O
66	PD21/D21/IRQ5	CHO_RESET	M66230 Reset		O
67	PD20/D20/IRQ4		Not used		O
68	PD19/D19/IRQ3	CHO_INT	Interrupt input for M66230		I
69	PD18/D18/IRQ2	PW_IN1	PW365 data input	reserved	I
70	PD17/D17/IRQ1	PW_IN0	PW365 AD Power Down input	L:AD Powrer DowníÚ	I
71	VSS	GND	-	-	-

No.	Name	Function Name	Function	Polarity	I/O
72	PD16/D16/IRQ0	PW_SW	Not used	-	
73	PD15/D15	DATA15	Data Bus 15	-	I/O
74	PD14/D14	DATA14	Data Bus 14	-	I/O
75	PD13/D13	DATA13	Data Bus 13	-	I/O
76	PD12/D12	DATA12	Data Bus 12	-	I/O
77	VCC	5V	-	-	-
78	PD11/D11	DATA11	Data Bus 11	-	I/O
79	VSS	GND	-	-	-
80	PD10/D10	DATA10	Data Bus 10	-	I/O
81	PD9/D9	DATA9	Data Bus 9	-	I/O
82	PD8/D8	DATA8	Data Bus 8	-	I/O
83	PD7/D7	DATA7	Data Bus 7	-	I/O
84	PD6/D6	DATA6	Data Bus 6	-	I/O
85	VCC	5V	-	-	-
86	PD5/D5	DATA5	Data Bus 5	-	I/O
87	VSS	GND	-	-	-
88	PD4/D4	DATA4	Data Bus 4	-	I/O
89	PD3/D3	DATA3	Data Bus 3	-	I/O
90	PD2/D2	DATA2	Data Bus 2	-	I/O
91	PD1/D1	DATA1	Data Bus 1	-	I/O
92	PD0/D0	DATA0	Data Bus 0	-	I/O
93	VSS	GND	-	-	-
94	XTAL	XTAL	X'tal oscillator input	-	I
95	MD3	Mode3	Multiplex setting with Mode 2 (Set H)		I
96	EXTAL	EXTAL	X'tal oscillator output	-	O
97	MD2	Mode2	Multiplex setting with Mode 3 (Set L)		I
98	NMI	CPURESET	Non maskarable interrupt input (for manual setting)		I
99	VCC (FWP)	FWP	Write mode for flash memory		I
100	PA16/AH	FLASH MODE	FWP Control		O
101	PA17/WAIT		Not used		O
102	MD1	Mode1	MCU setting with Mode 0 (Set H)		I
103	MD0	Mode0	MCU setting with Mode 1 (Set L)		I
104	PLLVCC	PLLVCC	Power supply for PLL		-
105	PLLCAP	PLLCAP	PLL filter		-
106	PLLVSS	PLLGND	Ground for PLL		-
107	PA15/CK	M-CLK	CPU clock output		O
108	RES	RESET	Reset	Active L	I
109	PE0/TIOC0A/DREQ0	ET7050SCS	ET7050 Serial chip select	Active L	O
110	PE1/TIOC0B/DRAK0	OPT4	XGA/SVGA switch option		I
111	PE2/TIOC0C/DREQ1		Not used		O
112	VCC	5V	-	-	-
113	PE3/TIOC0D/DRAK1	SDA3	IIC Bus 3 SDA		I/O
114	PE4/TIOC1A	SCL3	IIC Bus 3 SCL		I/O
115	PE5/TIOC1B	USB_BRST	USB pull-up option resistor on-off		O
116	PE6/TIOC2A		Not used		O
117	VSS	GND	-		-
118	PF0/AN0	KEY1	Key 1 input (A/D input)		I
119	PF1/AN1	KEY2	Key 2 input (A/D input)		I
120	PF2/AN2	KEY3	Key 3 input (A/D input)		I
121	PF3/AN3	OPT1	Destination option1 (A/D input)		I
122	PF4/AN4	OPT2	Destination option2 (A/D input)		I
123	PF5/AN5	LAMP DET	Lamp error detection		I
124	AVSS	GND	Ground for A/D	-	-
125	PF6/AN6	POWER FAIL	Power Fail input (Error at less than 2V)		I
126	PF7/AN7	OPT3	Not used		I
127	AVREF	5V	Reference voltage for A/D		I
128	AVCC	5V	Power for A/D	-	I
129	VSS	GND	-	-	-
130	PA0/RXD0	PW_RX	PW365 Rx	Active L	I
131	PA1/TXD0	PW_TX	PW365 Tx	Active L	O
132	PA2/SCK0/DREQ0/IRQ0	SEPA_INT	Interrupt input from M66230		I
133	PA3/RXD1	RXD	RS232C (Control Port)Rx	Active L	I
134	PA4/TXD1	SH_TXD	RS232C (Control Port)Tx	Active L	O
135	VCC	5V	-	-	-
136	PA5/SCK1/DREQ1/IRQ1	USB INTR	USB Interrupt input	Active L	I
137	PE7/TIOC2B	FAN SW	FAN ON/OFF switch		O
138	PE8/TIOC3A	LAMP SW	LAMP ON/OFF output	Active H	O
139	PE9/TIOC3B	SDATA OUT	3 Line serial data output		O
140	PE10/TIOC3C	SCLK	3 Line serial clock output		O
141	VSS	GND	-	-	-
142	PE11/TIOC3D	EXP RESET	I/O Expander(M66500FPM) reset output	Active H	O
143	PE12/TIOC4A	R/C	remote contol input	Active L	I
144	PE13/TIOC4B/MRES	PW RESET	PW365reset signal	Active L	O

● Parallel I/O Expander (IC1801, M66500FP)

No.	Name	Function Name	Function	Polarity	I/O
1	PF6	CG_FILTER	Not used (Initial: L)		O
2	PF7	DT_STB	-		O
3	Vcc	5V ±0%	-	-	-
4	PE0	A SW1	Audio SW 1 (SW1,SW2) = PC1:L, L PC2:H, L PC3:L,H		O
5	PE1	A SW2	Audio SW 2		O
6	PE2	IP_PWR_DN	IP Power down mode switch	H: Use IP L: Not use IP	O
7	PE3	IPSEL_CSA	Strobe signal for AD converter of IP converter	Active L	O
8	PE4	CHO_CD	M66230 Command Data switch output		O
9	PE5	SEPA_CD	Command Data switch output for Serial-Parallel converter		O
10	PE6	SEPA_CTS	Clear to Send output for Serial-Parallel converter		O
11	PE7	CHO_CTS	Clear to Send Clear to Send output for M66230		O
12	GND3	GND	-	-	-
13	PB0	LENS_TOP	Lens Top Detection	Top=L	I
14	PB1	M2/SEL0	Not used		I
15	PB2	LENS_BOT	Lens Bottom Detection	Bottom=L	I
16	PB3	USB_VBUS	USB VBUS input	H: USB connection	I
17	PB4	COMP-DET	Component input Y/N	L: Component input	I
18	PB5	S_SWIN	S-Video input Y/N	L: S-video input	I
19	PB6	VSYNC_DET	Not used (Initial: L)		I
20	PB7	M2/SEL1	Not used		I
21	PA7	RC_RESET	Not used		O
22	PA6	RCIDSW3	Remote control code switch	(SW1,2,3) = LLL: Code1	O
23	PA5	RCIDSW2		HLL: Code2	O
24	PA4	RCIDSW1		HHH:Code8	O
25	PA3	RC2_SW	Remote control receiver switch (Rear side)	L: active H: prohibit	O
26	PA2	RC1_SW	Remote control receiver switch (Front side)	L: active H: prohibit	O
27	PA1	Eco SW	Lamp Eco mode switch	H:Eco L:Normal	O
28	PA0	TURBO_ON/OFF	Turbo LED On/Off drive (not used)		O
29	Vcc	5V ±0%	5V ±10%	-	-
30	RD	READ_CPU	Read Select	Active L	I
31	WR	WRL_CPU	Write Select	Active L	I
32	CS	IO_CS	Chip Select	Active L	I
33	RESET	EXP_RST	Reset input	Active H	I
34	GND1	GND	-	-	-
35	A2	PORT_SEL2	Port Select 2	-	I
36	A1	PORT_SEL1	Port Select 1	-	I
37	A0	PORT_SEL0	Port Select 0	-	I
38	D0	D0	Data Bus 0	-	I/O
39	D1	D1	Data Bus 1	-	I/O
40	D2	D2	Data Bus 2	-	I/O
41	D3	D3	Data Bus 3	-	I/O
42	D4	D4	Data Bus 4	-	I/O
43	D5	D5	Data Bus 5	-	I/O
44	D6	D6	Data Bus 6	-	I/O
45	D7	D7	Data Bus 7	-	I/O
46	PC7	MOUSE/CPU-SW	Air Mouse Select	L: Air mouse active	O
47	PC6	NET_SW	Line Switch for RS232C-Port CtrlPort/WI	H: SCI-CtrlPort L: SCI-WI	O
48	PC5	7050RESET	7050 Reset		O
49	PC4	A_MUTE	Mute output	H: Mute On	O
50	PC0	CG1/CG2	Computer 1/Computer 2 switch	L: Com1 H:Com2	O
51	PC1	AV/CG	Computer/Video switch	L: PCAnalog, H: PCDigital,AV	O
52	PC2	CG/HD_SW	Not used	CG: L	O
53	PC3	DDC_CONT	Analog-DDC PC/CPU switch	CPU: H	O
54	PG0	CARD_IN	Viewer CF Card On/Off	L: No CF Card installed	I
55	PG1	VIEWER_ON	Viewer/wireless-LAN On/Off	L: MCI/W I installed H: No installed	I
56	PG2	W_LAN_IN	Input for Viewer/wireless-LAN distinction	H: WI L:No	I
57	PG3	SCDT_DIF	DVI Sync Detect input	H: DVI signal	I
58	GND2	GND	-	-	-
59	PF0	WARNING	Temp Warning LED output	LED On=L	O
60	PF1	LAMP_REP	Lamp Replace LED output	LED On =L	O
61	PF2	READY	Ready LED output	LED On =L	O
62	PF3	PD_DIF	DVI Power Down output (not used)	DVI Mode =H	O
63	PF4	DVI_CONT	Not used (Initial: L)		O
64	PF5	DDC_CONT_DVI	Digital-DDC PC/CPU switch		O

● IIC Bus I/O Expander (IC5581, M62320FP) Port Functions

Pin No.	Name	Function	Action		I/O
1	SO	Serial Data output port (Not connected)			O
2	SCL	IIC BUS SCL			I
3	SDA	IIC BUS SDA			I/O
4	D0	FOCUS+	FOCUS +	Active H	O
5	D1	FOCUS-	FOCUS -	Active H	O
6	D2	ZOOM+	ZOOM +	Active H	O
7	D3	ZOOM-	ZOOM -	Active H	O
8	Vss	GND			-
9	D4	LENS UP	LENS UP	Active H	O
10	D5	LENS DOWN	LENS DOWN	Active H	O
11	D6	BRIGHT ON	BRIGHT ON	Active H	O
12	D7	BRIGHT OFF	BRIGHT OFF	Active H	O
13	Vdd	Power supply +5V ±10 %			-
14	CS2	Slave address setting port 2 (GND)			I
15	CS1	Slave address setting port 1 (GND)			I
16	CS0	Slave address setting port 0 (GND)			I

● IIC Bus DA Converter (IC281, M62393FP) Port Functions

No.	Name	Function Name	Function	Polarity	I/O
1	R	Serial Data output port (Not connected)	O		
2	SCL	IIC BUS SCL			I
3	SDA	IIC BUS SDA			I/O
4	A05	Not used			O
5	A06	Not used			O
6	A07	Not used			O
7	A08	VRB AV black voltage adjustment			O
8	VrefL	DAC Lower Reference Voltage input	-		
9	VrefU 1	DAC Upper Reference Voltage input (CH5~CH8)			-
10	Vss	GND			-
11	VrefU2	DAC Upper Reference Voltage input (CH1~CH 4)			-
12	A01	PC_BCLP			O
13	A02	PC_GCLP			O
14	A03	PC_RCLP			O
15	A04	VOLUME			O
16	Vcc	Power Supply for Output Buffer (4.5V ~ 5.5V)			-
17	Vdd	Power Supply +5V±10 %			-
18	CS2	Slave address setting port 2 (GND)	I		
19	CS1	Slave address setting port 1 (Vdd)	I		
20	CS0	Slave address setting port 0 (GND)	I		

● IIC Bus DA Converter (IC3291, M62398FP) Port Functions

No.	Name	Function Name	Function	Polarity	I/O
1	R	Reset input			I
2	SCL	IIC BUS SCL			I
3	SDA	IIC BUS SDA			I/O
4	Ao7	BVRT	AV White voltage adj.		O
5	Ao8	GVRT	AV White voltage adj.		O
6	Ao9	RVRT	AV White voltage adj.		O
7	Ao10	B_BLK_DC	AV pedestal adj.		O
8	Ao11	G_BLK_DC	AV pedestal adj.		O
9	Ao12	R_BLK_DC	AV pedestal adj.		O
10	VrefL	DAC lower reference voltage input			-
11	VrefU1	DAC upper reference voltage input(CH5~CH8)			-
12	Vss	GND			-
13	VrefU2	DAC upper reference voltage input(CH1~CH4)			-
14	Ao1	AV_RCLP			O
15	Ao2	AV_GCLP			O
16	Ao3	AV_BCLP			O
17	Ao4	MACRO		H:PC,AV(1080i50Hz) L:AV	O
18	Ao5	SCPSW	Sandcastle pulse switch	Video/S-Video/480i/575i:L else:H	O
19	Ao6	BLKSW	H_BLK width switch	1080i/1035i/720p:H else:L	O
20	Vcc	Buffer power supply(4.5V ~ 5.5V)			-
21	Vdd	Power supply +5V+-10%			-
22	CS2	Setting pin 2 for slave address			I
23	CS1	Setting pin 1 for slave address			I
24	CS0	Setting pin 0 for slave address			I

● IIC Bus DA Converter (IC1531, M62399FP) Port Functions

No.	Name	Function Name	Function	Polarity	I/O
1	R	Reset input			I
2	SCL	IIC BUS SCL			I
3	SDA	IIC BUS SDA			I/O
4	A05	not use			O
5	A06	REF_B	B White-Black level adj.		O
6	A07	REF_G	G White-Black level adj.		O
7	A08	REF_R	R White-Black level adj.		O
8	VrefL	DAC lower reference voltage input			-
9	VrefU1	DAC upper reference voltage input(CH5~CH8)			-
10	Vss	GND			-
11	VrefU2	DAC upper reference voltage input(CH1~CH4)			-
12	A01	B_CENT			O
13	A02	G_CENT			O
14	A03	R_CENT			O
15	A04	not use			O
16	Vcc	Buffer power supply(2.4*VrefU ~ 12V)			-
17	Vdd	Power supply +5V+-10%			-
18	CS2	Setting pin 2 for slave address			I
19	CS1	Setting pin 1 for slave address			I
20	CS0	Setting pin 0 for slave address			I

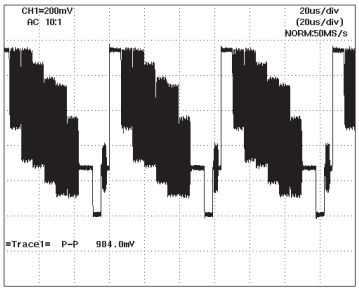
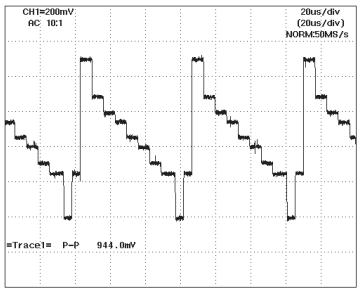
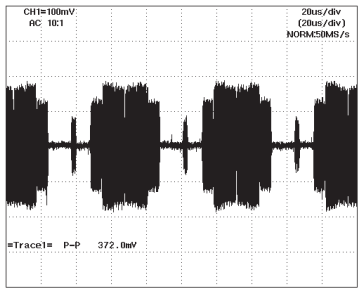
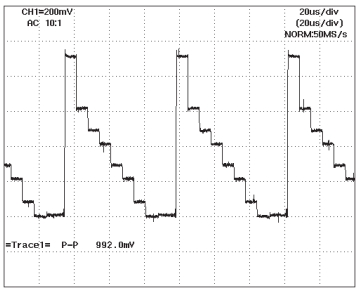
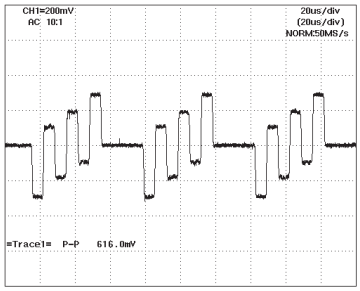
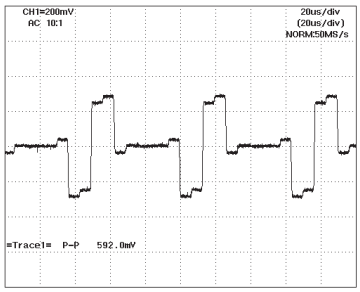
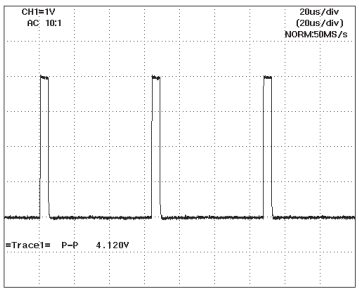
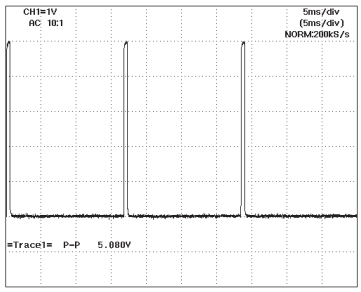
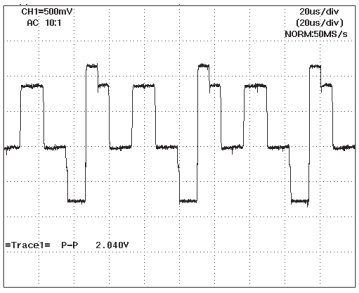
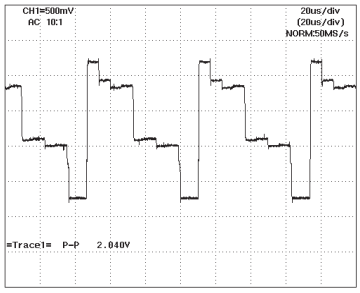
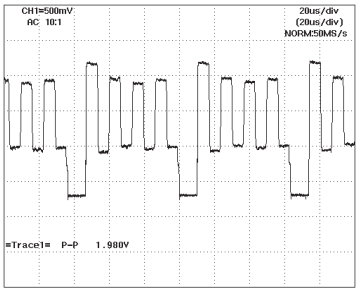
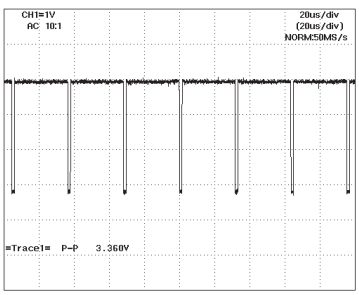
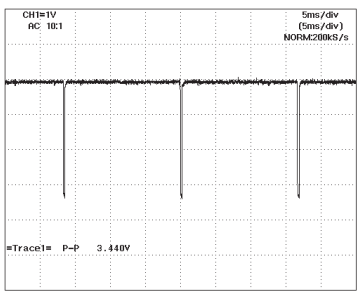
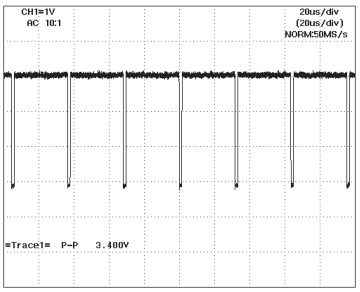
● IIC Bus DA Converter (IC1501, M62399FP) Port Functions

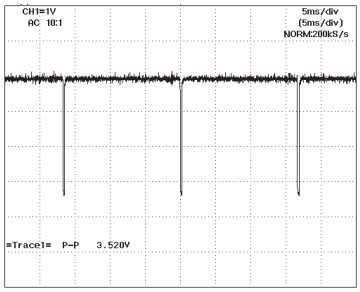
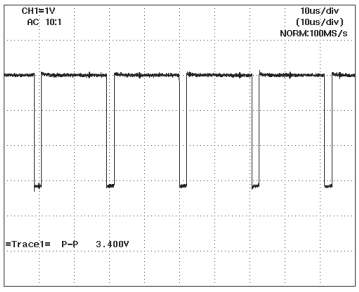
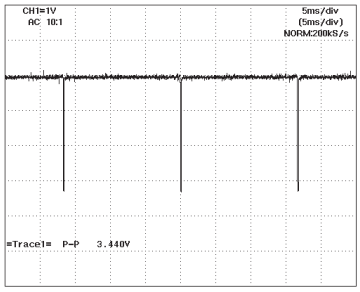
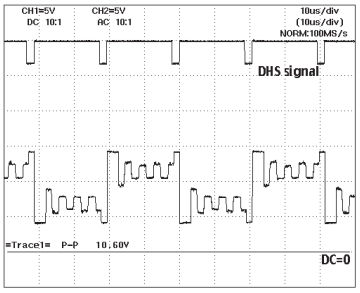
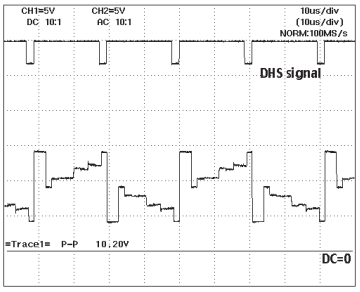
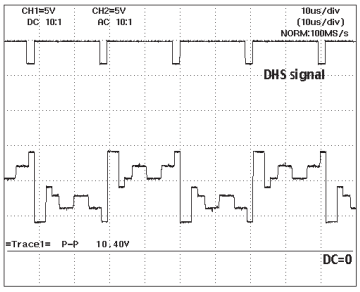
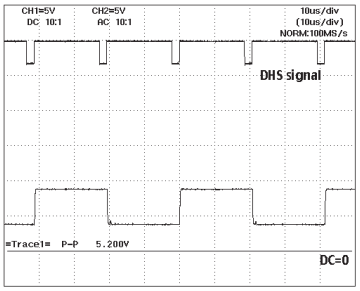
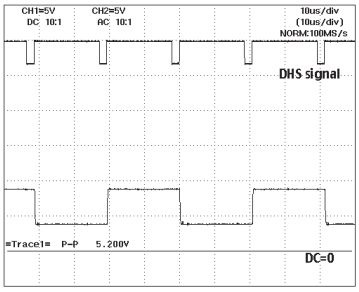
No.	Name	Function Name	Function	Polarity	I/O
1	R	Reset input			I
2	SCL	IIC BUS SCL			I
3	SDA	IIC BUS SDA			I/O
4	A05	not_use			O
5	A06	V_COMR	R-Common center adj.		O
6	A07	V_COMG	G-Common center adj.		O
7	A08	V_COMB	B-Common center adj.		O
8	VrefL	DAC lower reference voltage input			-
9	VrefU1	DAC upper reference voltage input(CH5~CH8)			-
10	Vss	GND			-
11	VrefU2	DAC upper reference voltage input(CH1~CH4)			-
12	A01	NRSB			O
13	A02	NRSA			O
14	A03	XRGT			O
15	A04	RGT			O
16	Vcc	Buffer power supply(2.4*VrefU ~ 12V)			-
17	Vdd	Power supply +5V+-10%			-
18	CS2	Setting pin 2 for slave address (GND)			I
19	CS1	Setting pin 1 for slave address (GND)			I
20	CS0	Setting pin 0 for slave address (GND)			I

● IIC Bus DA Converter (IC4881, M62393FP) Port Functions

No.	Name	Function Name	Function	Polarity	I/O
1	R	Reset input			I
2	SCL	IIC BUS SCL			I
3	SDA	IIC BUS SDA			I/O
4	A05	not use			O
5	A06	not use			O
6	A07	not use			O
7	A08	not use			O
8	VrefL	DAC lower reference voltage input			-
9	VrefU1	DAC upper reference voltage input(CH5~CH8)			-
10	Vss	GND			-
11	VrefU2	DAC upper reference voltage input(CH1~CH4)			-
12	A01	not use			O
13	A02	FAN_CONT3			O
14	A03	FAN_CONT2			O
15	A04	FAN_CONT1			O
16	Vcc	Buffer power supply(4.5V ~ 5.5V)			-
17	Vdd	Power supply +5V+-10%			-
18	CS2	Setting pin 2 for slave address (GND)			I
19	CS1	Setting pin 1 for slave address (GND)			I
20	CS0	Setting pin 0 for slave address (GND)			I

■ Waveform

VIDEO-IN <IC1141-4>	Y-IN <IC3101-5>	C-IN <IC3101-7>
		
VIDEO_Y <IC3101-21>	**VIDEO_CB <IC3101-22>**	**VIDEO_CR <IC3101-23>**
		
AV_HSYNC <IC3101-9>	**AV_VSYNC <IC3101-4>**	
		
AV_R-OUT <TP13R>	**AV_G-OUT <TP13G>**	**AV_B-OUT <TP13B>**
		
HD_OUT <TPHD>	**VD_OUT <TPVD>**	**GHS_PW <TPGHS>**
		

GVS_PW <TPGVS>	DHS <TPDHS>	DVS <TPDVS>
		
B-S&H OUT <TP501>	**G-S&H OUT <TP531>**	**R-S&H OUT <TP561>**
		
NRS-G<TP2531>	**NRS-B/R <TP2561>**	
		

■ Cleaning

After long periods of use, dust and other particles will accumulate on the LCD panel, prism, mirror, polarized glass, lens, etc., causing the picture to darken or color to blur. If this occurs, clean the inside of optical unit.

Remove dust and other particles using air spray. If dirt cannot be removed by air spray, disassemble and clean the optical unit.

Cleaning with air spray

1. Remove the cabinet top following to “Mechanical Disassemblies”.
2. Clean up the LCD panel and polarizing plate by using the air spray from the cabinet top opening.

Caution:
Use a commercial (inert gas) air spray designed for cleaning camera and computer equipment. Use a resin-based nozzle only. Be vary careful not to damage optical parts with the nozzle tip. Never use any kind of cleanser on the unit. Also, never use abrasive materials on the unit as this may cause irreparable damage.

Disassembly Cleaning

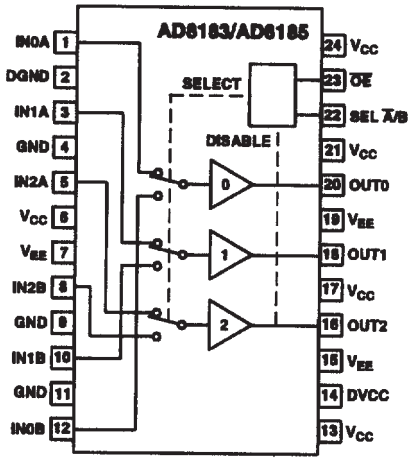
Disassembly cleaning method should only be performed when the unit is considerable dirty and cannot be sufficiently cleaned by air spraying alone.
Be sure to readjust the optical system after performing disassembly cleaning.

1. Remove the cabinet top and main units following to “Mechanical Disassemblies”.
2. Remove the optical base top following to “Optical Unit Disassemblies”. If the LCD panel needs cleaning, remove the LCD panel unit following to “LCD panel replacement”.
3. Clean the optical parts with a soft cloth. Clean extremely dirty areas using a cloth moistened with alcohol.

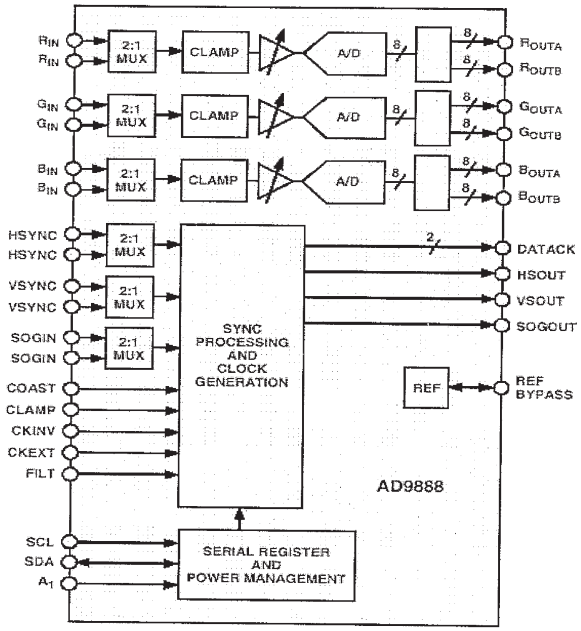
Caution:
The surface of the optical components consists of multiple dielectric layers with varying degrees of refraction. Never use organic solvents (thinner, etc.) or any kind of cleanser on these components.
Since the LCD panel is equipped with an electronic circuit, never use any liquids (water, etc.) to clean the unit. Use of liquid may cause the unit to malfunction.

■ IC Block Diagrams

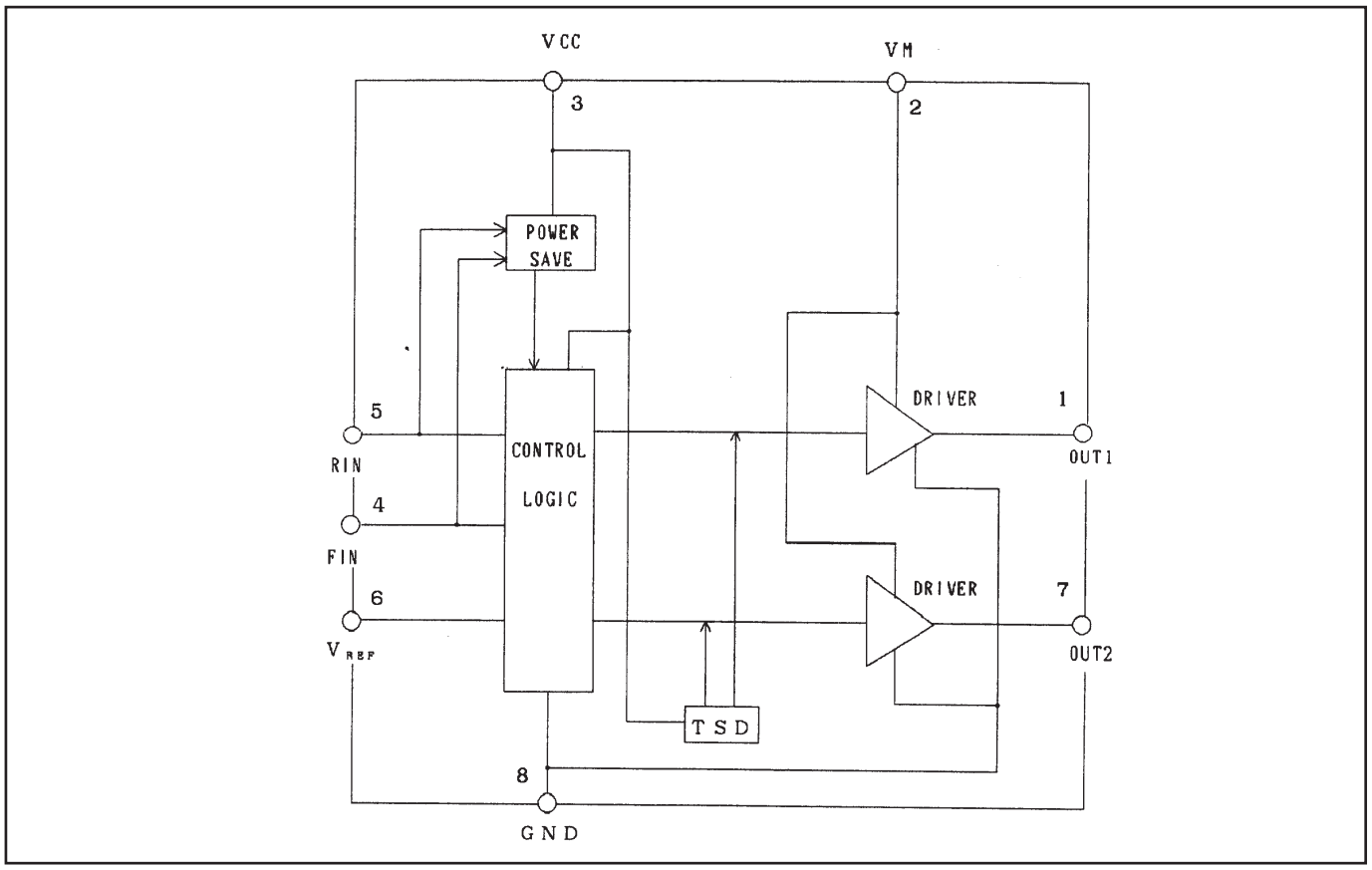
● AD8185ARU <Selector, IC3001>



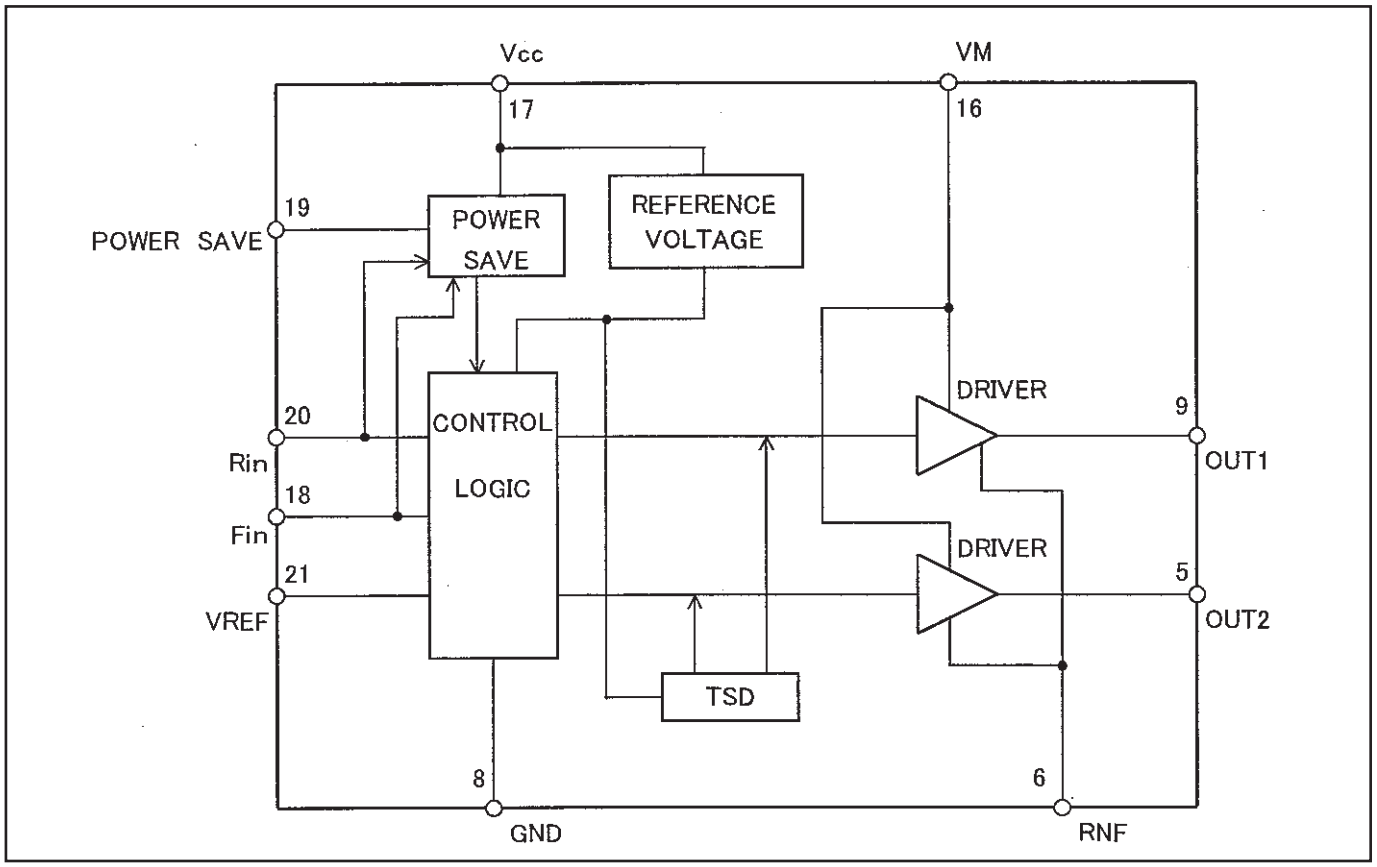
● AD9888KS140 <A/D, IC201>



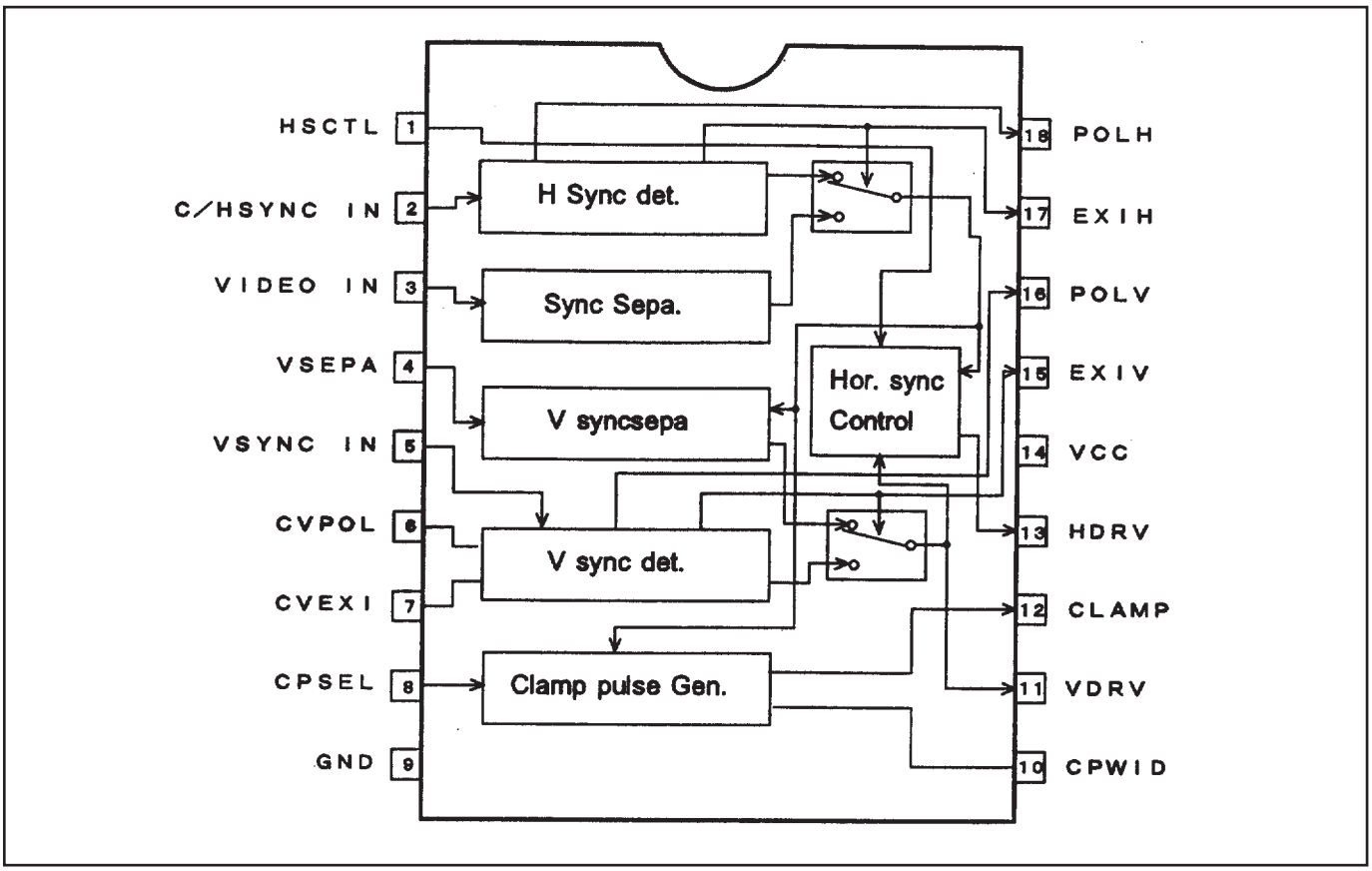
● BA6287F <Motor Drive, IC5501, IC5531, IC6501>



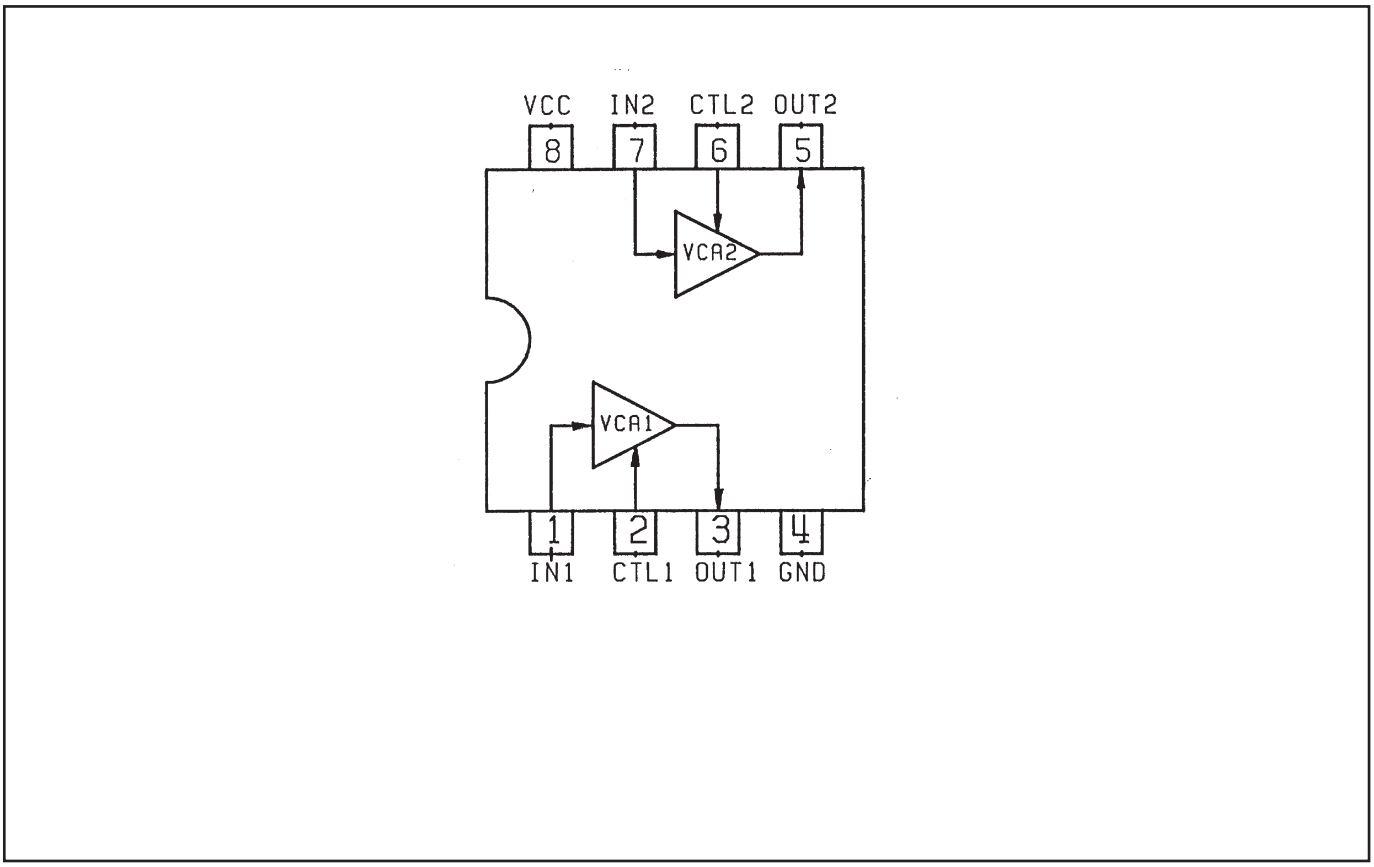
● BA6920F <Motor Drive, IC5561>



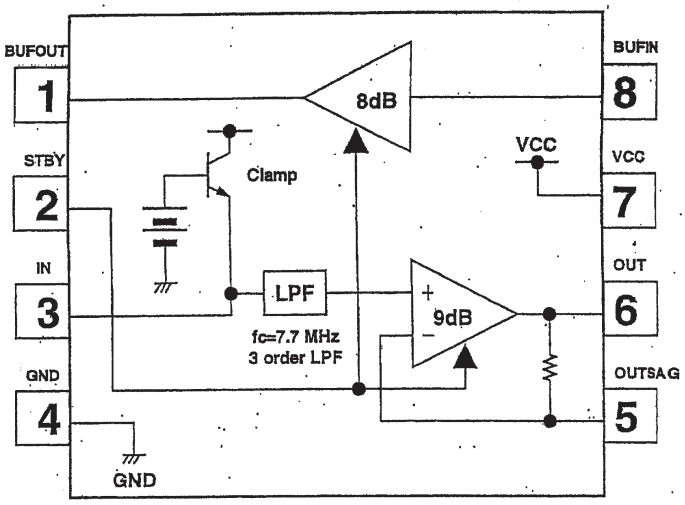
● BA7078AF <SynC. Detector, IC7201>



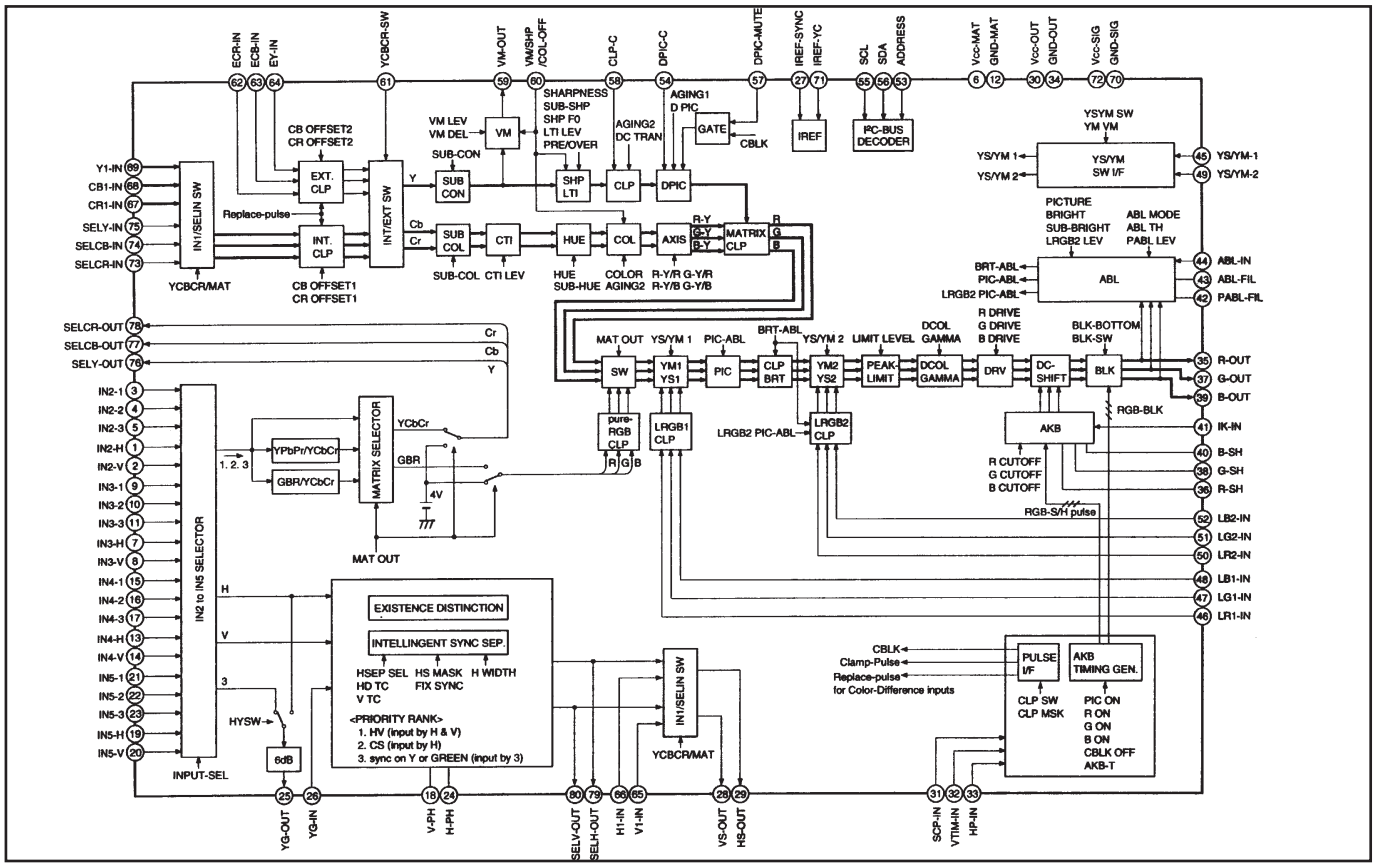
● BA7655 <Audio Pre-amp, IC001>



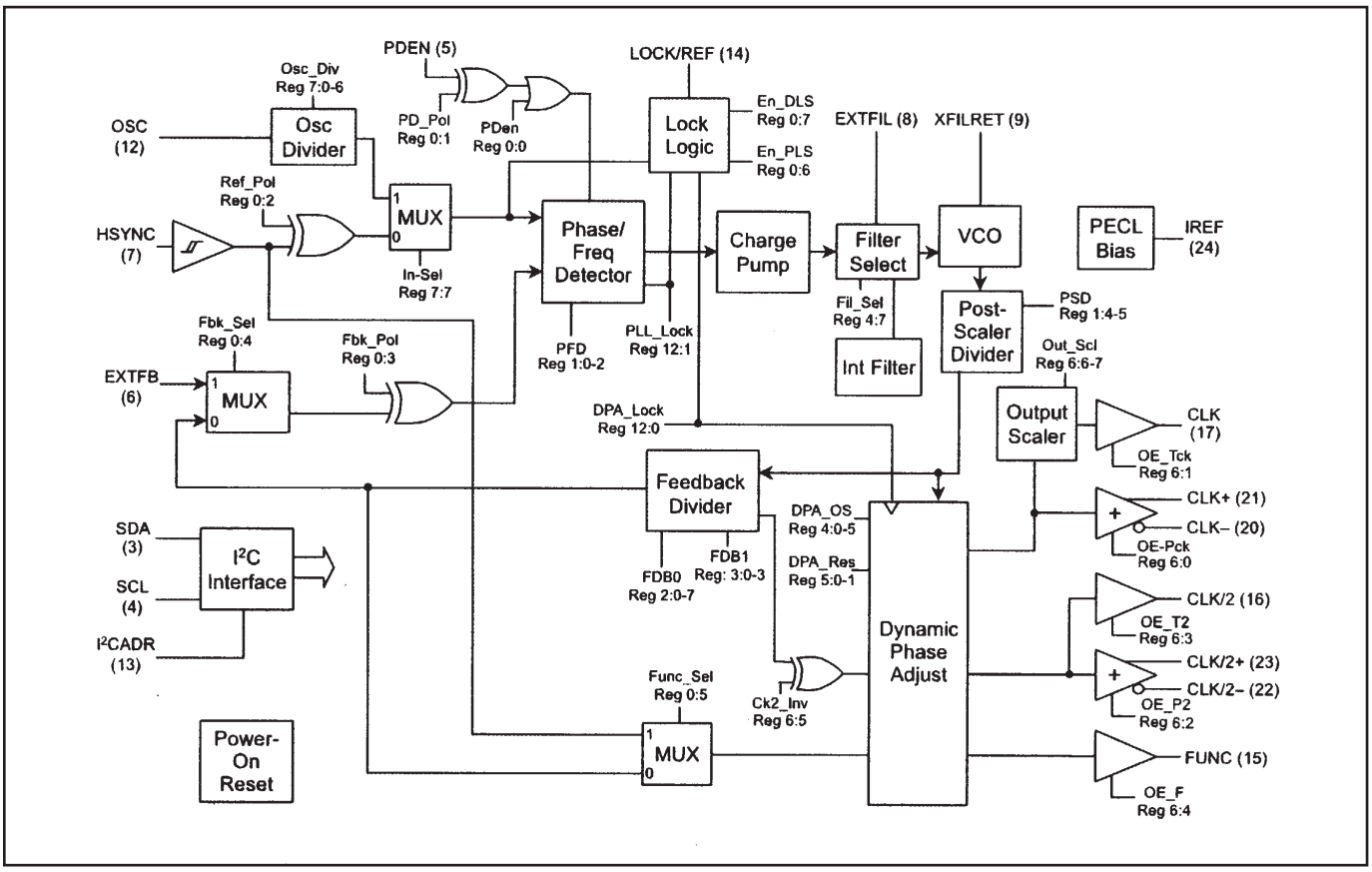
● DB7600 <Sync. Switch, IC3021, IC3022>



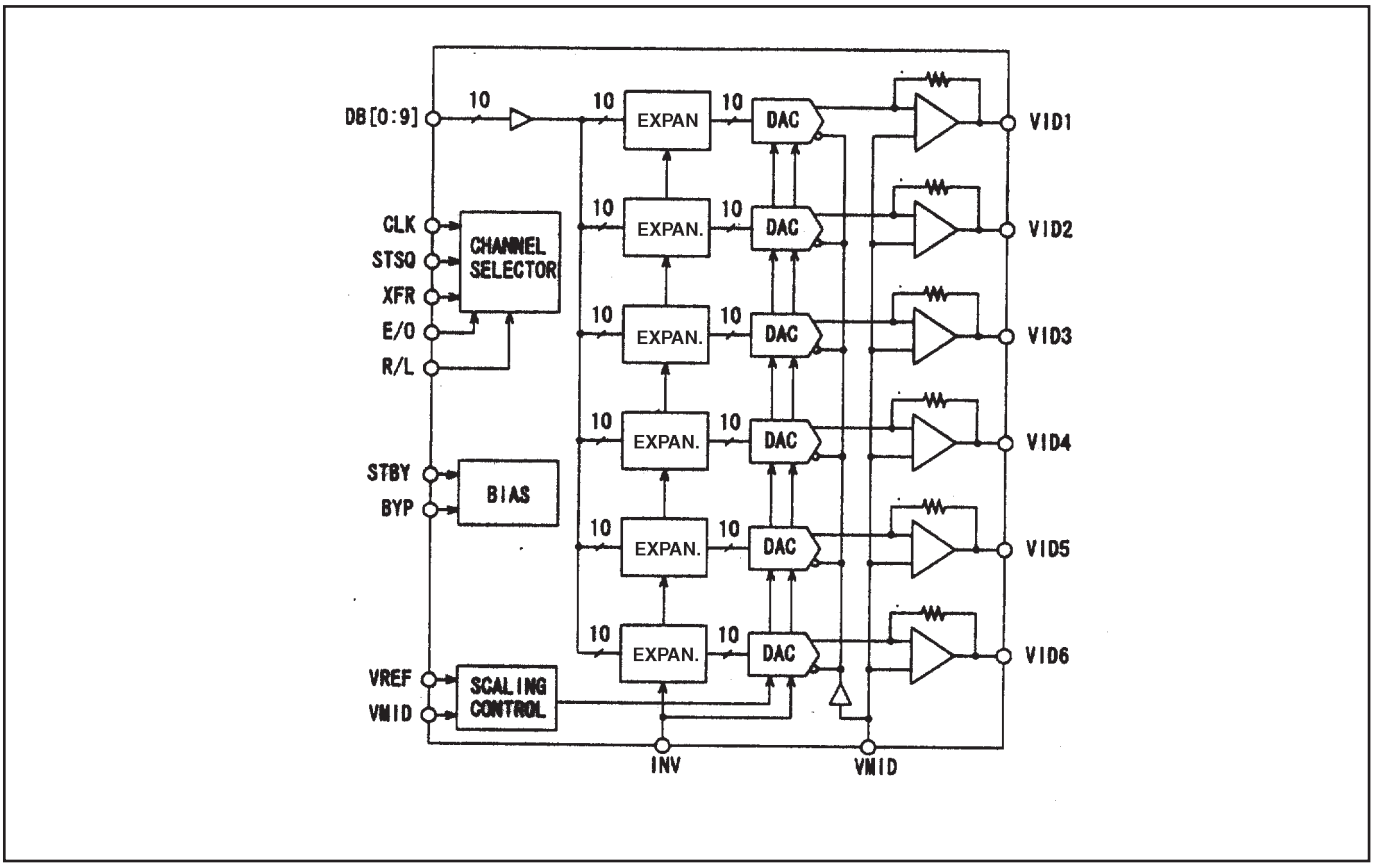
● CXA2101AQ <RGB Matrix, IC4101>



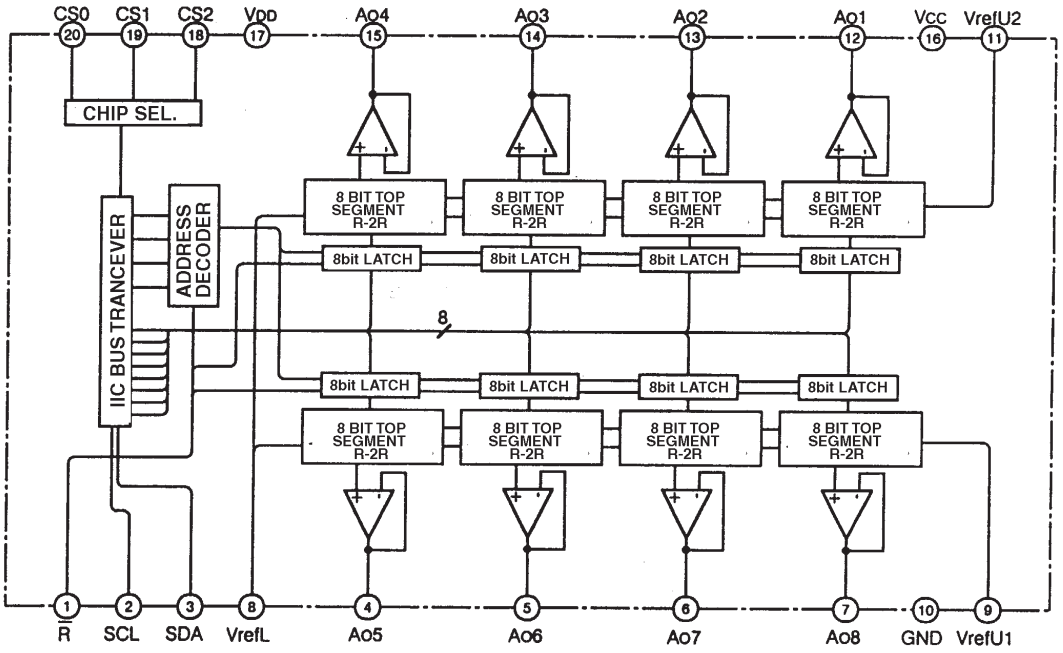
● ICS1523M <PLL, IC4231>



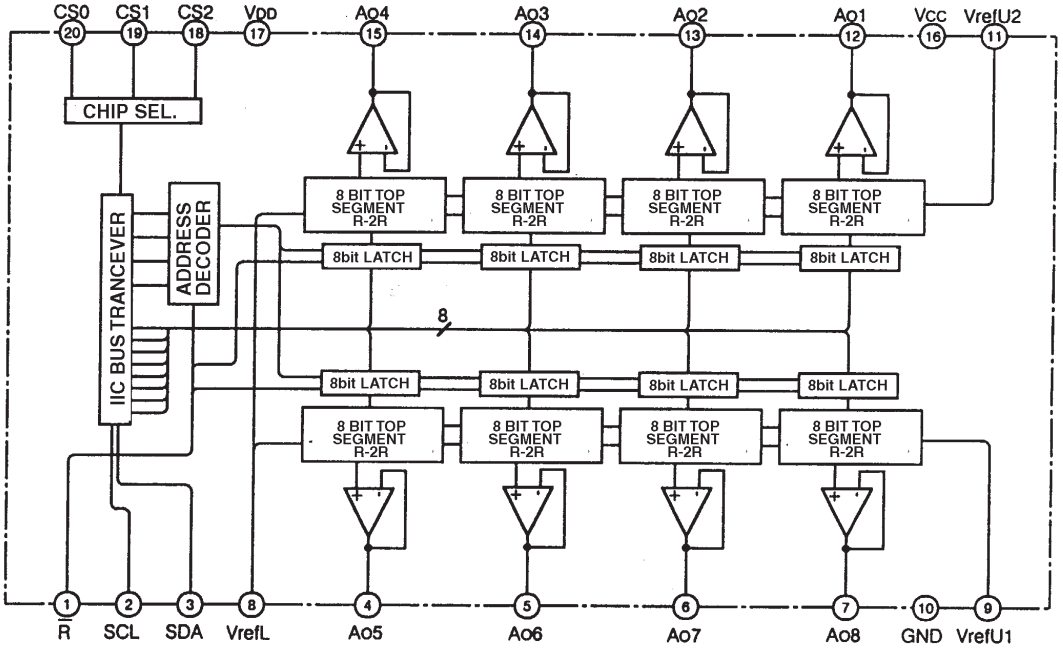
● L306070D <D/A-Sample & Hold, IC501, IC530, IC561>



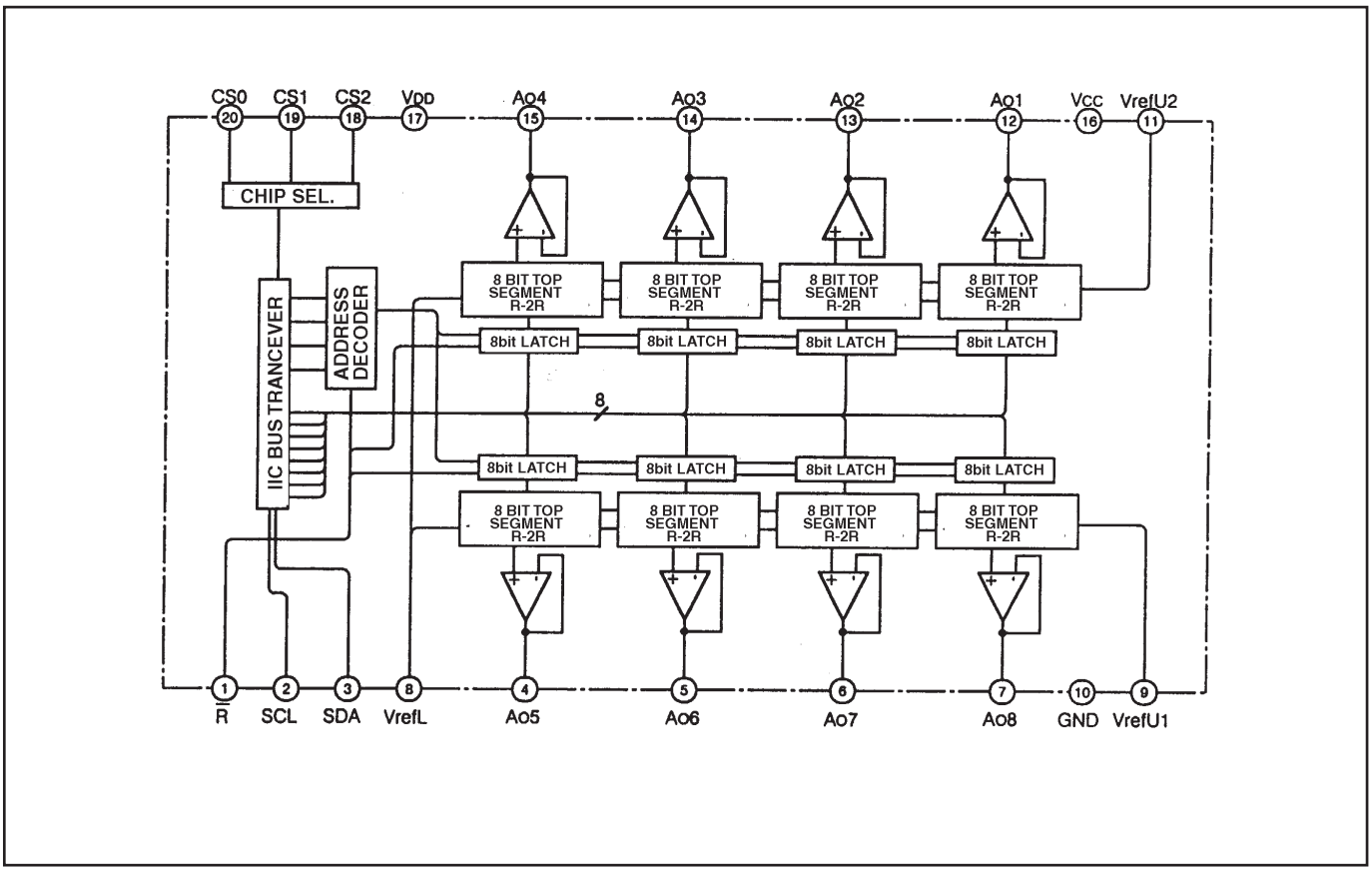
● M62392 <D/A, IC3291>


CS0 CS1 CS2 VDD Ao4 Ao3 Ao2 Ao1 Vcc VrefU2
20 19 18 17 15 14 13 12 16 11
CHIP SEL.
IIC BUS TRANCEVER
ADDRESS DECODER
8 BIT TOP SEGMENT R-2R
8bit LATCH
8
R SCL SDA VrefL Ao5 Ao6 Ao7 Ao8 GND VrefU1
1 2 3 8 4 5 6 7 10 9

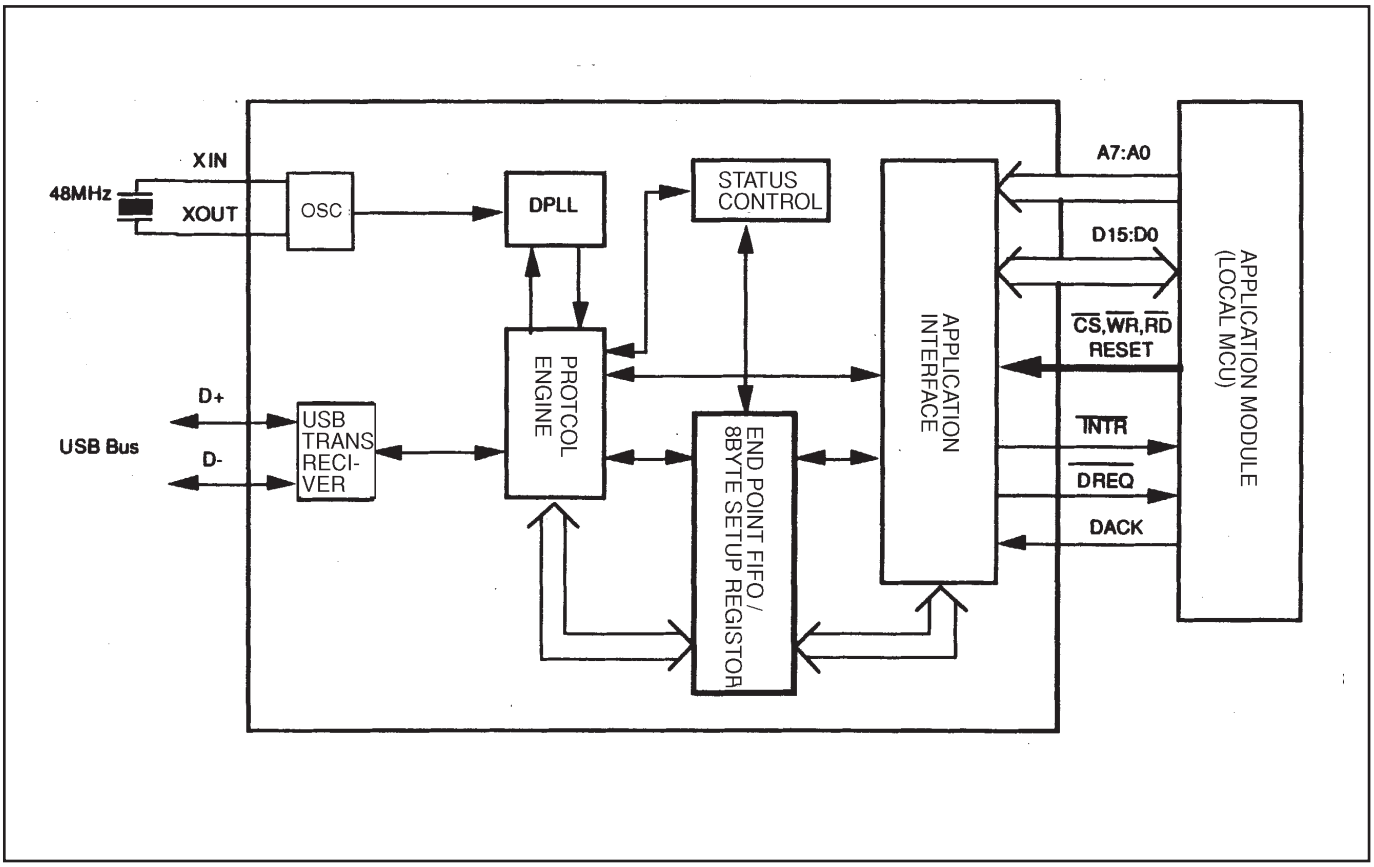
● M62393 <D/A, IC281, IC4881>


CS0 CS1 CS2 VDD Ao4 Ao3 Ao2 Ao1 Vcc VrefU2
20 19 18 17 15 14 13 12 16 11
CHIP SEL.
IIC BUS TRANCEVER
ADDRESS DECODER
8 BIT TOP SEGMENT R-2R
8bit LATCH
8
R SCL SDA VrefL Ao5 Ao6 Ao7 Ao8 GND VrefU1
1 2 3 8 4 5 6 7 10 9

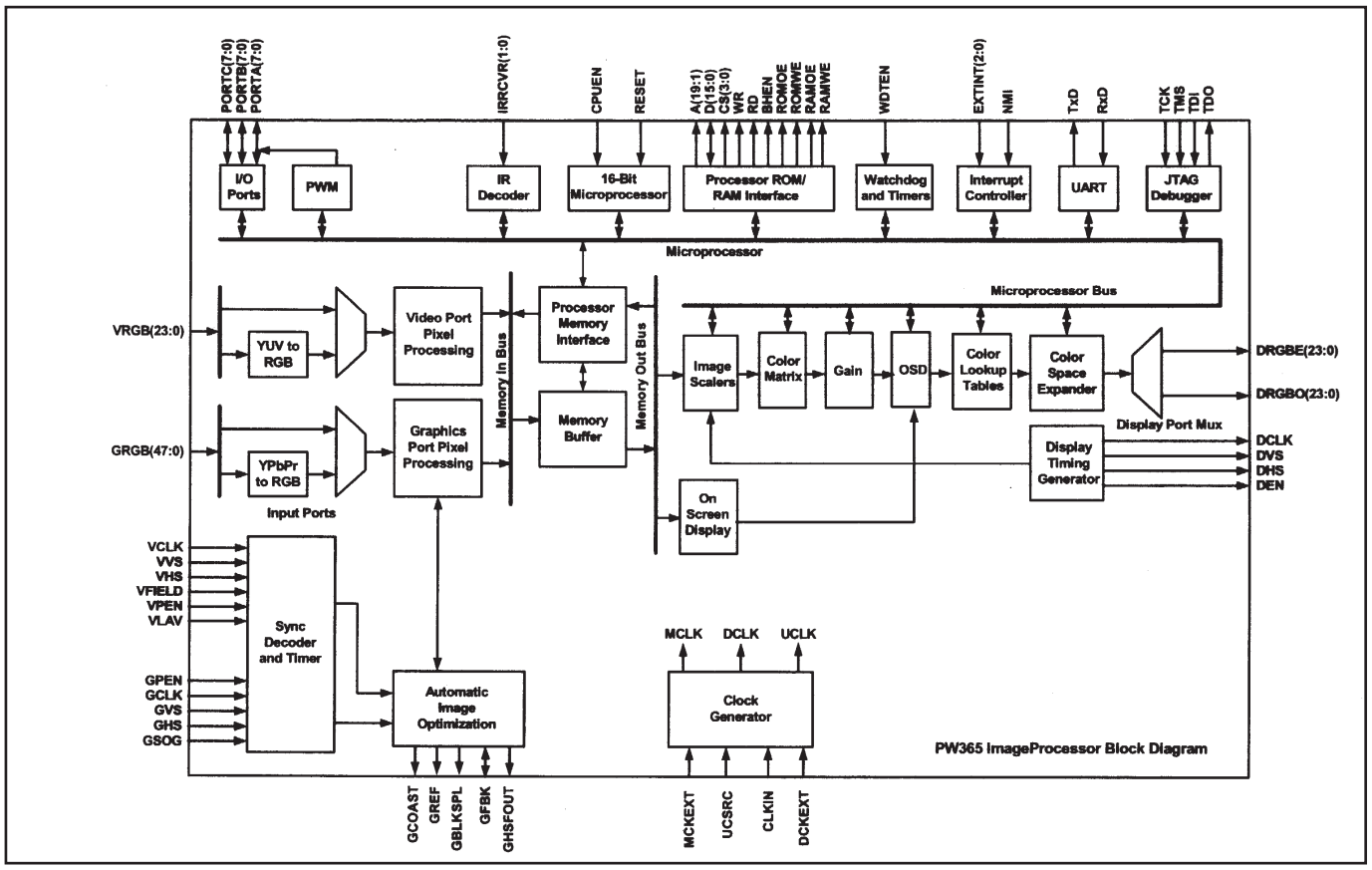
● M62399 <D/A, IC1501, IC1531>



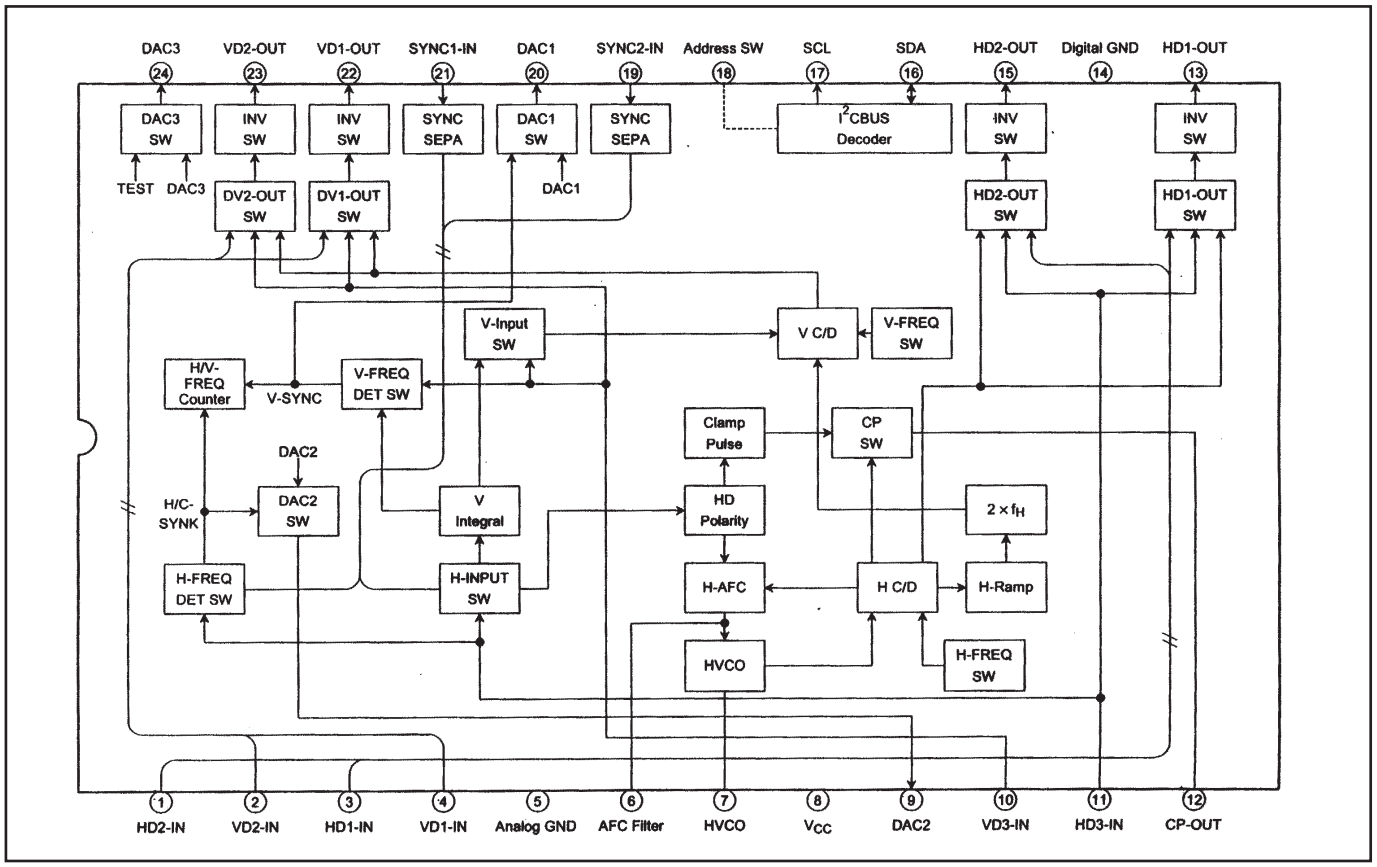
● ML60851 <USB Driver, IC9801>



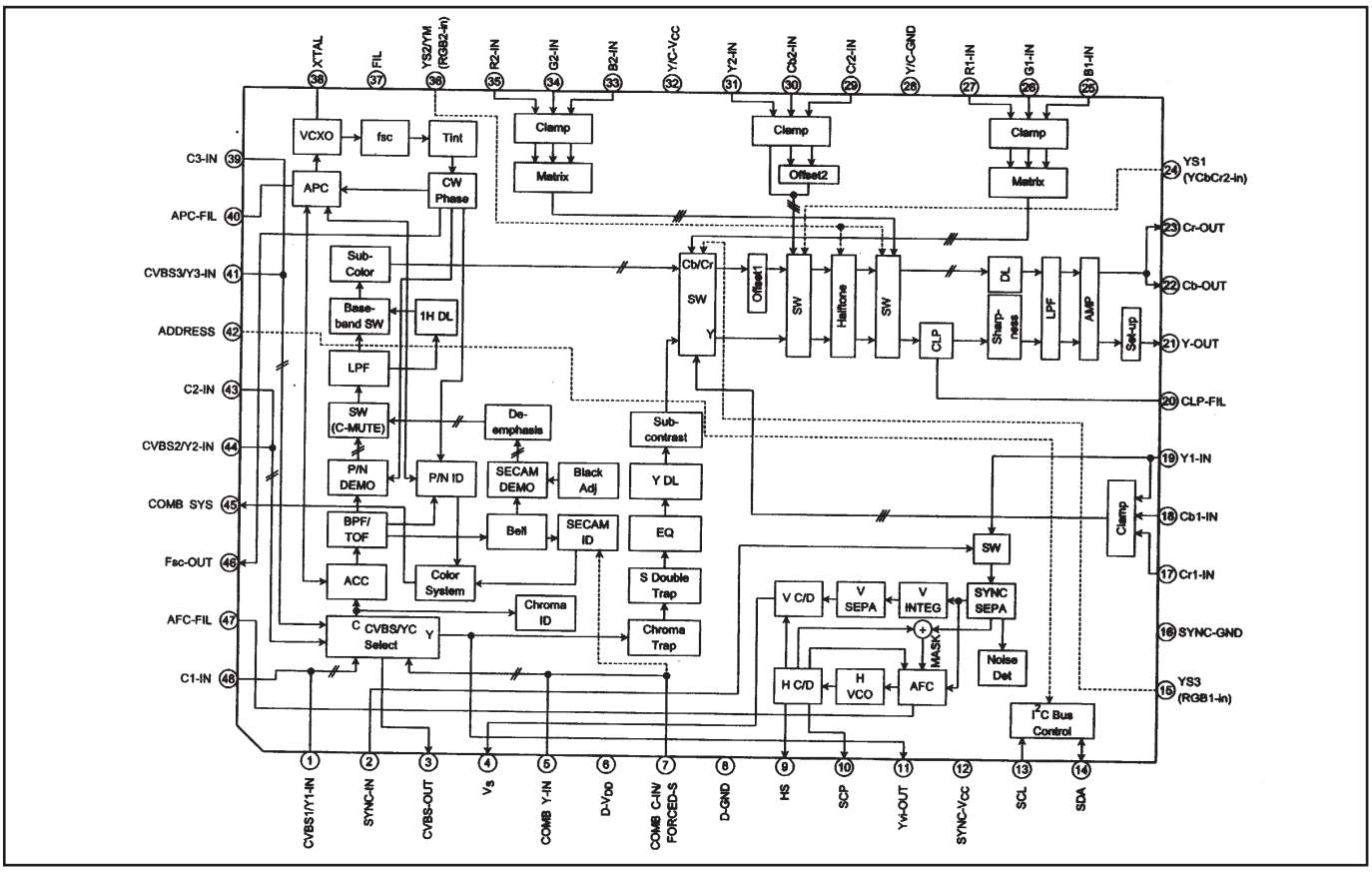
● PW365 <System Control & Scan Converter, IC301>



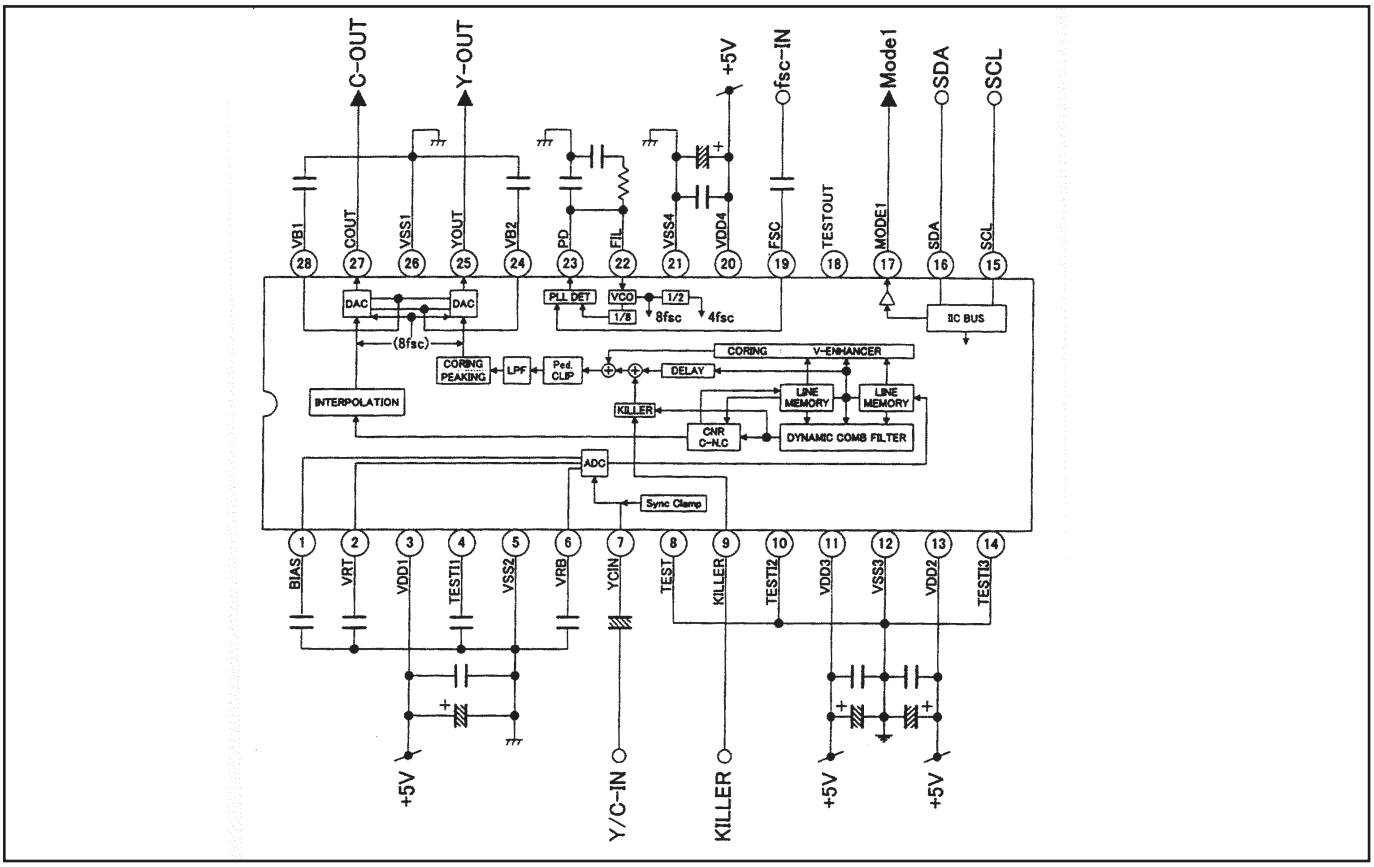
● TA1318AF <AFC Sync. Driver, IC6181>



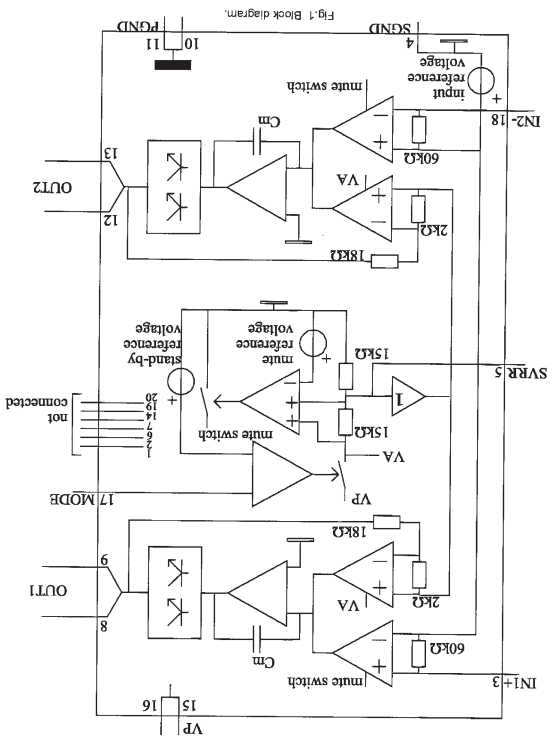
● TB1274AF <Video Decoder, IC1101>



● TC90A69F <PAL 3L-Y/C Separation, IC2101>



● TDA1517ATW <Audio Output, IC031>



■ Electrical Parts List

Product safety should be considered when a component replacement is made in any area of a projector. Components indicated by a ⚠ mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

● Read Description in the parts list

Read description in the Capacitor and Resistor as follows:

CAPACITOR CERAMIC 100P K 50V

Rated Voltage

Tolerance Symbols:

Less than 10pF

A : Not specified	B : ±0.1pF	C : ±0.25pF
D : ±0.5pF	E : +0 -1pF	F : ±1PF
G : ±2pF	H : +0.1 -0pF	L : +0 -0.1pF
R : ±0.25 -0pF	S : +0-0.25pF	

More than 10pF

A : Not specified	B : ±0.1%	C : ±0.25%
D : ±0.5%	F : ±1%	G : ±2%
H : ±3%	J : ±5%	K : ±10%
L : ±15%	M : ±20%	N : ±30%
P : +100-0%	Q : +30-10%	T : +50-10%
U : +75-10%	V : +20-10%	W : +100-10%
X : +40-20%	Y : +150-10%	Z : +80-20%

Rated value: P=pico farad, U=micro farad

Material:

CERAMIC	Ceramic
MT-PAPER	Metallized Paper
POLYESTER	Polyester
MT-POLYEST	Metallized Polyester
POLYPRO	Polypropylene
MT-POLYPRO	Metallized Polypropylene
COMPO FILM	Composite film
MT-COMPO	Metallized Composite
STYRENE	Styrene
TA-SOLID	Tantalum Oxide Solid Electrolytic
AL-SOLID	Aluminium Solid Electrolytic
ELECT	Aluminum Foil Electrolytic
NP-ELECT	Non-polarised Electrolytic
OS-SOLID	Aluminium Solid with Organic Semiconductive Electrolytic
POS-SOLID	Polymerized Organic Semiconductive
DL-ELECT	Double Layered Electrolytic
PPS-FILM	Polyphenylene Sulfide Film
MT-PPS-FILM	Metalized Polyphenylene Sulfide Film
MT-PEN-FILM	Metalized Polyethylenenaphthalate Film
CAPACITOR	Other

RESISTOR CARBON 4.7K J A 1/4W

Rated Wattage

Performance Symbols:

A: General B: Non flammable Z: Low noise

Other: Temperature coefficient

T: ±10ppm/°C	U: ±25ppm/°C	C: ±50ppm/°C
D: ±100ppm/°C	E: ±200ppm/°C	F: ±250ppm/°C
G: ±350ppm/°C	H: ±1000ppm/°C±10%	W: ±1200ppm/°C±10%
Y: ±1400ppm/°C±10%	J: ±2000ppm/°C±10%	K: ±2400ppm/°C±10%
L: ±2700ppm/°C±10%	M: ±3000ppm/°C±10%	N: ±3300ppm/°C±10%
P: ±3600ppm/°C±10%	Q: ±3900ppm/°C±10%	R: ±4200ppm/°C±10%
S: ±4300ppm/°C±10%	V: ±4500ppm/°C±10%	X: ±8000ppm/°C±10%

Tolerance Symbols:

A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5%
F: ±1% G: ±2% J: ±5% K: ±10%
M: ±20% P: +5-15% Z: 0 ohm

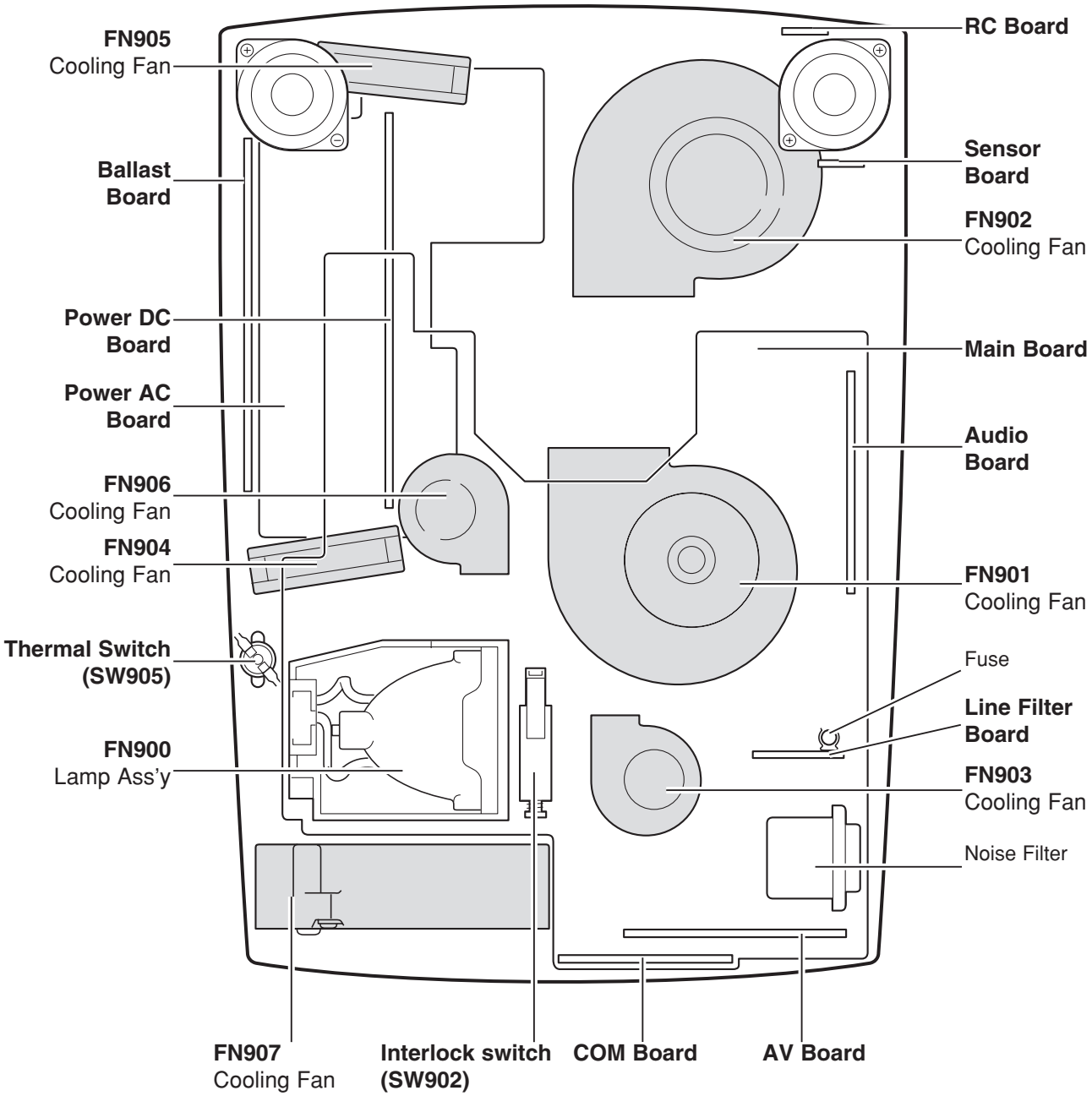
Rated value, ohms:
K: 1,000, M: 1,000,000

Material:

CARBON	Carbon
MT-FILM	Metal Film
OXIDE-MT	Oxide Metal Film
SOLID	Composition
MT-GLAZE	Metal Glaze
WIRE WOUND	Wire Wound
CERAMIC RES.	Ceramic
FUSIBLE RES.	Fusible
RESISTOR	Other

Note: Parts order must contain Chassis No., Part No., and Descriptions.

● OUT OF CIRCUIT BOARD



Key No.	Part No.	Description
ASSEMBLIED BOARDS		
⚠	**610 308 1724**	**ASSY,PWB,MAIN MH7A**
⚠	**610 301 1950**	**ASSY,PWB,TEMP.SENSOR MC3A**
⚠	**610 302 6435**	**ASSY,PWB,AUDIO MC3A**
⚠	**610 306 0279**	**ASSY,PWB,COM. MC3AB**
⚠	**610 300 6444**	**ASSY,PWB,A/V MC3A**
⚠	**610 300 6451**	**ASSY,PWB,R/C FRONT MC3A**
⚠	**610 302 5902**	**ASSY,PWB,CONTROL MC3A**
OUT OF CIRCUIT BOARDS		
⚠	LF901	645 056 7285 UNIT,NOISE FILTER
⚠	LP901	610 305 5602 COMPL,OPTICAL LAMP-MC3AA
⚠	A601	645 060 9695 UNIT,POWER(AC)
⚠	A602	645 054 9175 UNIT,POWER(DC)
⚠	A603	645 054 9199 UNIT,POWER(FILTER)
⚠	A901	645 058 8211 UNIT,BALLAST
⚠	FN901	645 055 8023 MOTOR,FAN DC 10.8W
⚠	FN902	645 055 8023 MOTOR,FAN DC 10.8W
⚠	FN903	645 055 7934 MOTOR,FAN DC 1.92W
⚠	FN904	645 056 6998 MOTOR,FAN DC 1.8W
⚠	FN905	645 056 7001 MOTOR,FAN DC 1.8W
⚠	FN906	645 055 7941 MOTOR,FAN DC 1.92W
⚠	FN907	645 055 8016 MOTOR,FAN DC 10.8W
	SP901	645 054 9205 SPEAKER,8
	SP902	645 054 9205 SPEAKER,8
⚠	SW902	645 031 7743 SWITCH,PUSH 2P-2TX2
⚠	SW905	645 048 3158 SWITCH,THERMAL
	WK8JK66F	645 057 7710 CORD,ID CONNECTOR
	WK8KK28B	645 050 4419 CORD,ID CONNECTOR
	WK8QK68A	645 057 7734 CORD,ID CONNECTOR
	WK8RK28A	645 042 9200 CORD,ID CONNECTOR
⚠		645 058 8181 FUSE(250V, 8A)
MAIN BOARD		
610 308 1724 ASSY,PWB,MAIN MH7A		
TRANSISTOR		
	Q1101	405 134 5905 TR 2SA1037AK-T146-R
		405 147 2205 TR 2SA1037AK-S-T146
		405 002 0308 TR 2SA1037K T146 R
		405 002 0407 TR 2SA1037K T146 S
		405 002 6706 TR 2SA1179-M6-TB
		405 002 6904 TR 2SA1179-M7-TB
		405 163 1503 TR 2SA1179N-M6-TB
		405 163 2708 TR 2SA1179N-M7-TB
		405 173 9605 TR 2SA1235A1E
		405 173 9704 TR 2SA1235A1F
	Q1141	405 014 4509 TR 2SC2412K T146 R
		405 014 4608 TR 2SC2412K T146 S
		405 015 8704 TR 2SC2812-L6-TB
		405 015 8902 TR 2SC2812-L7-TB
		405 163 1602 TR 2SC2812N-L6-TB0
		405 163 1701 TR 2SC2812N-L7-TB0
		405 173 9803 TR 2SC3928A1R
		405 173 9902 TR 2SC3928A1S
	Q1142	405 014 4509 TR 2SC2412K T146 R
		405 014 4608 TR 2SC2412K T146 S
		405 015 8704 TR 2SC2812-L6-TB
		405 015 8902 TR 2SC2812-L7-TB
		405 163 1602 TR 2SC2812N-L6-TB0
		405 163 1701 TR 2SC2812N-L7-TB0
		405 173 9803 TR 2SC3928A1R
		405 173 9902 TR 2SC3928A1S
	Q1143	405 014 4509 TR 2SC2412K T146 R
		405 014 4608 TR 2SC2412K T146 S
		405 015 8704 TR 2SC2812-L6-TB
		405 015 8902 TR 2SC2812-L7-TB
		405 163 1602 TR 2SC2812N-L6-TB0
		405 163 1701 TR 2SC2812N-L7-TB0
		405 173 9803 TR 2SC3928A1R
		405 173 9902 TR 2SC3928A1S
	Q1144	405 134 5905 TR 2SA1037AK-T146-R
		405 147 2205 TR 2SA1037AK-S-T146
		405 002 0308 TR 2SA1037K T146 R
		405 002 0407 TR 2SA1037K T146 S
		405 002 6706 TR 2SA1179-M6-TB
		405 002 6904 TR 2SA1179-M7-TB
		405 163 1503 TR 2SA1179N-M6-TB
		405 163 2708 TR 2SA1179N-M7-TB
		405 173 9605 TR 2SA1235A1E
		405 173 9704 TR 2SA1235A1F
	Q1145	405 014 4509 TR 2SC2412K T146 R
		405 014 4608 TR 2SC2412K T146 S
		405 015 8704 TR 2SC2812-L6-TB
		405 015 8902 TR 2SC2812-L7-TB
		405 163 1602 TR 2SC2812N-L6-TB0
		405 163 1701 TR 2SC2812N-L7-TB0
		405 173 9803 TR 2SC3928A1R
		405 173 9902 TR 2SC3928A1S
	Q1146	405 134 5905 TR 2SA1037AK-T146-R
		405 147 2205 TR 2SA1037AK-S-T146
		405 002 0308 TR 2SA1037K T146 R
		405 002 0407 TR 2SA1037K T146 S
		405 002 6706 TR 2SA1179-M6-TB
		405 002 6904 TR 2SA1179-M7-TB
		405 163 1503 TR 2SA1179N-M6-TB
		405 163 2708 TR 2SA1179N-M7-TB
		405 173 9605 TR 2SA1235A1E
		405 173 9704 TR 2SA1235A1F
	Q1147	405 134 5905 TR 2SA1037AK-T146-R
		405 147 2205 TR 2SA1037AK-S-T146
		405 002 0308 TR 2SA1037K T146 R
		405 002 0407 TR 2SA1037K T146 S
		405 002 6706 TR 2SA1179-M6-TB
		405 002 6904 TR 2SA1179-M7-TB
		405 163 1503 TR 2SA1179N-M6-TB
		405 163 2708 TR 2SA1179N-M7-TB
		405 173 9605 TR 2SA1235A1E
		405 173 9704 TR 2SA1235A1F
	Q1148	405 134 5905 TR 2SA1037AK-T146-R
		405 147 2205 TR 2SA1037AK-S-T146
		405 002 0308 TR 2SA1037K T146 R
		405 002 0407 TR 2SA1037K T146 S
		405 002 6706 TR 2SA1179-M6-TB
		405 002 6904 TR 2SA1179-M7-TB
		405 163 1503 TR 2SA1179N-M6-TB
		405 163 2708 TR 2SA1179N-M7-TB
		405 173 9605 TR 2SA1235A1E
		405 173 9704 TR 2SA1235A1F
	Q1149	405 014 4509 TR 2SC2412K T146 R
		405 014 4608 TR 2SC2412K T146 S
		405 015 8704 TR 2SC2812-L6-TB
		405 015 8902 TR 2SC2812-L7-TB
		405 163 1602 TR 2SC2812N-L6-TB0
		405 163 1701 TR 2SC2812N-L7-TB0
		405 173 9803 TR 2SC3928A1R

Electrical Parts List

Key No.	Part No.	Description
	405 173 9902	TR 2SC3928A1S
Q1151	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q1161	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q1163	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q141	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q142	405 014 4509	TR 2SC2412K T146 R
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	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q143	405 014 4509	TR 2SC2412K T146 R
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	405 015 8902	TR 2SC2812-L7-TB
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	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q144	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q145	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
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	405 163 1701	TR 2SC2812N-L7-TB0
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	405 173 9902	TR 2SC3928A1S
Q146	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q147	405 014 4509	TR 2SC2412K T146 R
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	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q148	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q149	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q1561	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q1851	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q1852	405 014 4509	TR 2SC2412K T146 R
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	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2101	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S

Key No.	Part No.	Description
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2102	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2501	405 002 8304	TR 2SA1203-Y-TE12L
Q2502	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2511	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2541	405 014 4509	TR 2SC2412K T146 R
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	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2571	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2591	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q271	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q3103	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB

Key No.	Part No.	Description
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3111	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3112	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3113	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3116	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3117	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3118	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3171	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3172	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0

Electrical Parts List

Key No.	Part No.	Description
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3173	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3181	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3182	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q3301	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3302	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q4181	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q4182	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q4801	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q4802	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q4803	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q4804	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q4805	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q4807	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q4891	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5131	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S

Key No.	Part No.	Description
Q5132	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q5168	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q6141	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q6142	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q6146	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q6161	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q6166	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q6171	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q6176	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q9801	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
INTEGRATED CIRCUIT		
IC1101	409 515 9803	IC UPD64083GF-3BA
IC1102	409 416 6406	IC BA033FP-E2
	409 410 1001	IC UPC2933T-E1
IC1141	409 434 8109	IC TC4053BFT-(EL)
IC1161	409 499 1701	IC PQ025EZ01ZP
	409 461 7700	IC PQ2TZ15
IC141	409 527 6807	IC NJM2575F1
IC1501	409 428 9600	IC M62399FP
IC1531	409 428 9600	IC M62399FP
IC1561	409 398 1901	IC L88MS05TL-TL
IC1571	409 431 2308	IC BA12FP-E2
IC1801	409 475 3705	IC M66500FP
IC1802	410 364 6905	IC TC74ACT138FT-EL
IC1841	409 350 2908	IC TC7W126FU-(TE12L)
IC1851	409 359 1100	IC TC7W240FU-TE12L
IC1871	409 481 8602	IC LM76CHMX-5
IC1872	409 481 8602	IC LM76CHMX-5
IC1873	409 481 8602	IC LM76CHMX-5
IC201	409 520 4305	IC AD9888KS-140
IC2101	409 504 5007	IC TC90A69F
IC241	409 416 6406	IC BA033FP-E2
	409 410 1001	IC UPC2933T-E1
IC242	409 416 6406	IC BA033FP-E2
	409 410 1001	IC UPC2933T-E1
IC243	409 416 6406	IC BA033FP-E2
	409 410 1001	IC UPC2933T-E1
IC2531	409 390 0001	IC LM7171AIMX
	409 486 7709	IC LM7171BIMX
IC2561	409 343 0201	IC LT1206CS8
IC261	409 357 6602	IC LT1260CS
IC271	409 404 7200	IC TC7SET00FU-(TE85L)
IC281	409 458 3401	IC M62393FP
IC301	409 501 8308	IC PW365-10U
IC304	409 339 3605	IC 24LC16BT/SN-T
IC306	409 301 5309	IC TC7S32FU-TE85L
IC3101	409 504 9005	IC TB1274AF
IC3102	409 416 6505	IC BA05FP-E2
IC3103	409 416 6505	IC BA05FP-E2
IC3201	410 429 8202	IC MB40C348VPFV
IC3251	409 416 6406	IC BA033FP-E2
	409 410 1001	IC UPC2933T-E1
IC3252	409 416 6406	IC BA033FP-E2
	409 410 1001	IC UPC2933T-E1

Electrical Parts List

Key No.	Part No.	Description
IC3253	409 416 6406	IC BA033FP-E2
	409 410 1001	IC UPC2933T-E1
IC3291	409 506 0406	IC M62392FP
IC341	410 352 8508	IC IDT71V016S15PHTR
	410 397 0406	IC IC61LV6416-15T
IC3501	409 528 7506	IC L3E01040F0A
IC351	410 498 6109	IC MBM29LV800TA90C372
IC3531	409 528 7506	IC L3E01040F0A
IC3561	409 528 7506	IC L3E01040F0A
IC361	409 501 9107	IC ICS512MT
IC362	409 501 9107	IC ICS512MT
IC391	409 416 6406	IC BA033FP-E2
IC392	409 534 1703	IC SI-3025LSA-TL
IC401	409 543 4009	IC L3E07052K0A
IC4101	409 474 0002	IC CXA2101AQ
IC4201	410 426 8106	IC TC240C4FTB-C006(O)
IC4231	409 444 8700	IC ICS1523M-ER
IC4251	410 401 7506	IC TC74VCX16374FT
IC4261	410 401 7506	IC TC74VCX16374FT
IC4271	410 401 7506	IC TC74VCX16374FT
IC4281	410 362 6501	IC TC74LCX541FT
IC451	409 534 1703	IC SI-3025LSA-TL
IC4801	409 416 6406	IC BA033FP-E2
IC4811	410 325 4605	IC TC74LCX244FT
	410 325 4704	IC HD74LVC244AT
IC4821	410 325 4605	IC TC74LCX244FT
	410 325 4704	IC HD74LVC244AT
IC4831	410 365 5600	IC SN74LVCC4245APWR
IC4881	409 458 3401	IC M62393FP
IC4891	409 404 7200	IC TC7SET00FU-(TE85L)
IC501	409 502 3302	IC L3E06070D0A
IC5131	409 323 8906	IC TC4W53FU(TE12L)
IC5191	409 404 0805	IC BA7623F
IC531	409 502 3302	IC L3E06070D0A
IC561	409 502 3302	IC L3E06070D0A
IC6101	409 428 8405	IC TC7WT125FU-TE12L
IC6111	409 431 6009	IC MC74VHC14DT
	410 356 8009	IC SN74LV14APWR
IC6121	409 158 5804	IC TC74HC123AF-TP1
IC6131	409 158 5804	IC TC74HC123AF-TP1
IC6161	409 428 8405	IC TC7WT125FU-TE12L
IC6181	409 545 7503	IC TA1370FG
IC6182	409 301 5408	IC TC7S14FU
IC6301	410 365 4603	IC MS82V16520-8AGA
IC6321	410 365 4603	IC MS82V16520-8AGA
IC6341	410 365 4603	IC MS82V16520-8AGA
IC6361	410 365 4603	IC MS82V16520-8AGA
IC6381	409 534 1703	IC SI-3025LSA-TL
IC8001	410 451 8805	IC SII161BCT100
IC8003	409 434 8109	IC TC4053BFT-(EL)
IC8004	409 487 5803	IC 24C01CT/SN
IC801	410 445 9603	IC HD64F7045F28-C047
IC802	409 344 1900	IC MN1382-Q-TX
IC803	410 487 8404	IC MBM29F160BE-90-C316
IC804	410 458 5104	IC IS61C6416-15T
IC8041	410 362 6501	IC TC74LCX541FT
IC805	409 438 5609	IC TC74ACT08FT
IC8051	409 429 6806	IC TC74LCX74FT-(EL)
IC8061	410 321 8300	IC TC74VCX16244FT
IC8071	410 321 8300	IC TC74VCX16244FT
IC808	409 339 3605	IC 24LC16BT/SN-T
IC8081	410 321 8300	IC TC74VCX16244FT
IC8091	410 362 6501	IC TC74LCX541FT
IC811	409 155 8006	IC TC7S04F-TE85L
IC812	410 325 4704	IC HD74LVC244AT
IC813	409 462 2407	IC TC7SZ08FU-(TE85L)
IC814	410 362 6501	IC TC74LCX541FT
IC815	410 362 6501	IC TC74LCX541FT
IC816	410 362 6600	IC TC74ACT541FT
IC9801	409 468 8908	IC ML60851CTB
	409 521 4502	IC ML60851DTB
IC9821	410 325 4704	IC HD74LVC244AT
IC9831	409 327 6700	IC TC7W02FU-TE12L
IC9861	409 418 8606	IC M66230FP-200D
IC9881	409 418 8606	IC M66230FP-200D
IC9882	410 356 8009	IC SN74LV14APWR
CAPACITOR		
C1101	403 164 0204	CERAMIC 0.1U Z 25V
C1102	403 164 0204	CERAMIC 0.1U Z 25V
C1103	403 164 0204	CERAMIC 0.1U Z 25V
C1105	403 321 2607	ELECT 10U M 16V
C1106	403 164 0204	CERAMIC 0.1U Z 25V
C1107	403 164 0204	CERAMIC 0.1U Z 25V
C1108	403 164 0204	CERAMIC 0.1U Z 25V
C1109	403 164 0204	CERAMIC 0.1U Z 25V
C1111	403 321 2607	ELECT 10U M 16V
	403 335 0309	ELECT 10U M 16V
C1112	403 164 0204	CERAMIC 0.1U Z 25V
C1113	403 164 0204	CERAMIC 0.1U Z 25V
C1114	403 164 0204	CERAMIC 0.1U Z 25V
C1115	403 322 7809	ELECT 220U M 6.3V
C1116	403 162 4006	ELECT 22U M 6.3V
C1117	403 164 0204	CERAMIC 0.1U Z 25V
C1118	403 323 1301	CERAMIC 0.47U Z 10V
C1119	403 164 0204	CERAMIC 0.1U Z 25V
C1120	403 155 4204	CERAMIC 15P J 50V
C1121	403 323 1301	CERAMIC 0.47U Z 10V
C1122	403 304 2105	ELECT 47U M 6.3V
C1123	403 145 9905	CERAMIC 22P J 50V
C1124	403 145 9905	CERAMIC 22P J 50V
C1125	403 280 0805	ELECT 330U M 6.3V
C1126	403 164 0204	CERAMIC 0.1U Z 25V
C1127	403 155 1302	CERAMIC 150P J 50V
C1128	403 155 1302	CERAMIC 150P J 50V
C1129	403 215 2201	CERAMIC 0.01U K 50V
C1131	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C1132	403 164 0204	CERAMIC 0.1U Z 25V
C1133	403 321 2607	ELECT 10U M 16V
	403 335 0309	ELECT 10U M 16V
C1134	403 164 0204	CERAMIC 0.1U Z 25V
C1135	403 322 7809	ELECT 220U M 6.3V
C1136	403 322 7809	ELECT 220U M 6.3V
C1137	403 323 1301	CERAMIC 0.47U Z 10V
C1141	403 164 0204	CERAMIC 0.1U Z 25V
C1142	403 149 9208	CERAMIC 0.01U Z 50V
C1143	403 304 3300	ELECT 47U M 16V
C1144	403 164 0204	CERAMIC 0.1U Z 25V
C1145	403 321 2607	ELECT 10U M 16V
C1146	403 283 6309	CERAMIC 1U Z 10V
C1148	403 164 0204	CERAMIC 0.1U Z 25V
C1162	403 139 7306	CERAMIC 18P J 50V
C1163	403 157 3106	CERAMIC 56P J 50V
C1165	403 266 8108	NP-ELECT 1U M 50V
C140	403 280 0805	ELECT 330U M 6.3V
C141	403 298 9609	CERAMIC 0.1U K 16V
C142	403 175 4802	NP-ELECT 10U M 10V
C143	403 164 0204	CERAMIC 0.1U Z 25V
C144	403 321 2607	ELECT 10U M 16V
C145	403 283 6309	CERAMIC 1U Z 10V
C146	403 164 0204	CERAMIC 0.1U Z 25V
C147	403 304 3300	ELECT 47U M 16V
C148	403 283 6309	CERAMIC 1U Z 10V
C1501	403 164 0204	CERAMIC 0.1U Z 25V

Electrical Parts List

Key No.	Part No.	Description			Key No.	Part No.	Description		
C1502	403 164 0204	CERAMIC	0.1U Z	25V	C221	403 283 6309	CERAMIC	1U Z	10V
C1503	403 164 0204	CERAMIC	0.1U Z	25V	C222	403 283 6309	CERAMIC	1U Z	10V
C1504	403 304 2105	ELECT	47U M	6.3V	C223	403 283 6309	CERAMIC	1U Z	10V
C151	403 283 6309	CERAMIC	1U Z	10V	C224	403 283 6309	CERAMIC	1U Z	10V
C152	403 266 8108	NP-ELECT	1U M	50V	C226	403 338 0108	CERAMIC	0.039U K	25V
C1531	403 164 0204	CERAMIC	0.1U Z	25V	C227	403 157 7203	CERAMIC	3900P K	50V
C1532	403 164 0204	CERAMIC	0.1U Z	25V	C228	403 283 6309	CERAMIC	1U Z	10V
C1533	403 304 2105	ELECT	47U M	6.3V	C229	403 283 6309	CERAMIC	1U Z	10V
C1534	403 164 0204	CERAMIC	0.1U Z	25V	C231	403 283 6309	CERAMIC	1U Z	10V
C1561	403 304 3300	ELECT	47U M	16V	C232	403 283 6309	CERAMIC	1U Z	10V
C1562	403 304 1801	ELECT	100U M	6.3V	C233	403 283 6309	CERAMIC	1U Z	10V
	403 373 7704	ELECT	100U M	6.3V	C234	403 283 6309	CERAMIC	1U Z	10V
C1563	403 164 0204	CERAMIC	0.1U Z	25V	C236	403 283 6309	CERAMIC	1U Z	10V
C1564	403 283 6309	CERAMIC	1U Z	10V	C237	403 283 6309	CERAMIC	1U Z	10V
C1572	403 304 3300	ELECT	47U M	16V	C241	403 164 0204	CERAMIC	0.1U Z	25V
C1573	403 164 0204	CERAMIC	0.1U Z	25V	C242	403 164 0204	CERAMIC	0.1U Z	25V
C165	403 113 3805	CERAMIC	1000P K	50V	C243	403 304 1801	ELECT	100U M	6.3V
C1801	403 164 0204	CERAMIC	0.1U Z	25V		403 373 7704	ELECT	100U M	6.3V
C1802	403 164 0204	CERAMIC	0.1U Z	25V	C244	403 164 0204	CERAMIC	0.1U Z	25V
C1803	403 164 0204	CERAMIC	0.1U Z	25V	C245	403 164 0204	CERAMIC	0.1U Z	25V
C1804	403 304 1801	ELECT	100U M	6.3V	C246	403 304 1801	ELECT	100U M	6.3V
	403 373 7704	ELECT	100U M	6.3V		403 373 7704	ELECT	100U M	6.3V
C1851	403 164 0204	CERAMIC	0.1U Z	25V	C247	403 164 0204	CERAMIC	0.1U Z	25V
C1861	403 164 0204	CERAMIC	0.1U Z	25V	C248	403 164 0204	CERAMIC	0.1U Z	25V
C1871	403 164 0204	CERAMIC	0.1U Z	25V	C249	403 304 1801	ELECT	100U M	6.3V
C1872	403 164 0204	CERAMIC	0.1U Z	25V		403 373 7704	ELECT	100U M	6.3V
C1873	403 164 0204	CERAMIC	0.1U Z	25V	C2501	403 321 2607	ELECT	10U M	16V
C1874	403 155 1609	CERAMIC	33P J	50V		403 335 0309	ELECT	10U M	16V
C1875	403 155 1609	CERAMIC	33P J	50V	C2511	403 164 0204	CERAMIC	0.1U Z	25V
C1876	403 155 1609	CERAMIC	33P J	50V	C2512	403 164 0204	CERAMIC	0.1U Z	25V
C1877	403 155 1609	CERAMIC	33P J	50V	C2513	403 164 0204	CERAMIC	0.1U Z	25V
C1878	403 155 1609	CERAMIC	33P J	50V	C2514	403 162 5300	ELECT	4.7U M	25V
C1879	403 155 1609	CERAMIC	33P J	50V	C2516	403 164 0204	CERAMIC	0.1U Z	25V
C202	403 164 0204	CERAMIC	0.1U Z	25V	C2517	403 321 2607	ELECT	10U M	16V
C203	403 164 0204	CERAMIC	0.1U Z	25V	C2518	403 164 0204	CERAMIC	0.1U Z	25V
C204	403 283 6309	CERAMIC	1U Z	10V	C2521	403 229 3508	ELECT	100U M	16V
C206	403 164 0204	CERAMIC	0.1U Z	25V		403 335 0408	ELECT	100U M	16V
C207	403 164 0204	CERAMIC	0.1U Z	25V	C2522	403 164 0204	CERAMIC	0.1U Z	25V
C208	403 283 6309	CERAMIC	1U Z	10V	C2531	403 229 3508	ELECT	100U M	16V
C209	403 283 6309	CERAMIC	1U Z	10V		403 335 0408	ELECT	100U M	16V
C2101	403 149 9208	CERAMIC	0.01U Z	50V	C2532	403 164 0204	CERAMIC	0.1U Z	25V
C2102	403 149 9208	CERAMIC	0.01U Z	50V	C2533	403 157 3601	CERAMIC	100P J	50V
C2103	403 304 1801	ELECT	100U M	6.3V	C2541	403 164 0204	CERAMIC	0.1U Z	25V
	403 373 7704	ELECT	100U M	6.3V	C2542	403 164 0204	CERAMIC	0.1U Z	25V
C2104	403 164 0204	CERAMIC	0.1U Z	25V	C2543	403 162 5300	ELECT	4.7U M	25V
C2106	403 149 9208	CERAMIC	0.01U Z	50V	C2544	403 164 0204	CERAMIC	0.1U Z	25V
C2107	403 149 9208	CERAMIC	0.01U Z	50V	C2546	403 164 0204	CERAMIC	0.1U Z	25V
C2108	403 266 8108	NP-ELECT	1U M	50V	C2547	403 321 2607	ELECT	10U M	16V
C2111	403 304 2105	ELECT	47U M	6.3V	C2548	403 164 0204	CERAMIC	0.1U Z	25V
C2112	403 164 0204	CERAMIC	0.1U Z	25V	C2561	403 229 3508	ELECT	100U M	16V
C2113	403 304 2105	ELECT	47U M	6.3V		403 335 0408	ELECT	100U M	16V
C2114	403 164 0204	CERAMIC	0.1U Z	25V	C2562	403 164 0204	CERAMIC	0.1U Z	25V
C2116	403 164 0204	CERAMIC	0.1U Z	25V	C2563	403 157 3601	CERAMIC	100P J	50V
C2117	403 304 2105	ELECT	47U M	6.3V	C2564	403 149 9208	CERAMIC	0.01U Z	50V
C2118	403 164 0204	CERAMIC	0.1U Z	25V	C2571	403 164 0204	CERAMIC	0.1U Z	25V
C2119	403 164 0204	CERAMIC	0.1U Z	25V	C2572	403 164 0204	CERAMIC	0.1U Z	25V
C212	403 164 0204	CERAMIC	0.1U Z	25V	C2573	403 162 5300	ELECT	4.7U M	25V
C2121	403 305 9905	CERAMIC	680P J	25V	C2574	403 164 0204	CERAMIC	0.1U Z	25V
C2122	403 149 9208	CERAMIC	0.01U Z	50V	C2576	403 164 0204	CERAMIC	0.1U Z	25V
C2123	403 149 9208	CERAMIC	0.01U Z	50V	C2577	403 321 2607	ELECT	10U M	16V
C2127	403 164 0204	CERAMIC	0.1U Z	25V	C2578	403 164 0204	CERAMIC	0.1U Z	25V
C213	403 283 6309	CERAMIC	1U Z	10V	C261	403 149 9208	CERAMIC	0.01U Z	50V
C214	403 283 6309	CERAMIC	1U Z	10V	C262	403 149 9208	CERAMIC	0.01U Z	50V
C216	403 164 0204	CERAMIC	0.1U Z	25V	C263	403 149 9208	CERAMIC	0.01U Z	50V
C217	403 283 6309	CERAMIC	1U Z	10V	C266	403 322 7809	ELECT	220U M	6.3V
C218	403 283 6309	CERAMIC	1U Z	10V		403 349 4706	ELECT	220U M	6.3V
C219	403 283 6309	CERAMIC	1U Z	10V	C267	403 164 0204	CERAMIC	0.1U Z	25V

Electrical Parts List

Key No.	Part No.	Description		Key No.	Part No.	Description	
C268	403 322 7809	ELECT	220U M 6.3V	C3193	403 157 2901	CERAMIC	47P J 50V
	403 349 4706	ELECT	220U M 6.3V	C3194	403 157 2901	CERAMIC	47P J 50V
C269	403 164 0204	CERAMIC	0.1U Z 25V	C3195	403 145 9905	CERAMIC	22P J 50V
C271	403 298 9609	CERAMIC	0.1U K 16V	C3196	403 157 3601	CERAMIC	100P J 50V
C272	403 298 9609	CERAMIC	0.1U K 16V	C3197	403 157 2901	CERAMIC	47P J 50V
C282	403 283 6309	CERAMIC	1U Z 10V	C3198	403 145 9905	CERAMIC	22P J 50V
C283	403 283 6309	CERAMIC	1U Z 10V	C3199	403 157 3601	CERAMIC	100P J 50V
C284	403 322 7809	ELECT	220U M 6.3V	C321	403 164 0204	CERAMIC	0.1U Z 25V
	403 349 4706	ELECT	220U M 6.3V	C322	403 164 0204	CERAMIC	0.1U Z 25V
C301	403 164 0204	CERAMIC	0.1U Z 25V	C3221	403 283 6309	CERAMIC	1U Z 10V
C302	403 304 1801	ELECT	100U M 6.3V	C3222	403 283 6309	CERAMIC	1U Z 10V
	403 373 7704	ELECT	100U M 6.3V	C3223	403 283 6309	CERAMIC	1U Z 10V
C303	403 304 1801	ELECT	100U M 6.3V	C3224	403 283 6309	CERAMIC	1U Z 10V
	403 373 7704	ELECT	100U M 6.3V	C3225	403 283 6309	CERAMIC	1U Z 10V
C304	403 164 0204	CERAMIC	0.1U Z 25V	C3226	403 164 0204	CERAMIC	0.1U Z 25V
C307	403 164 0204	CERAMIC	0.1U Z 25V	C3227	403 164 0204	CERAMIC	0.1U Z 25V
C308	403 164 0204	CERAMIC	0.1U Z 25V	C3228	403 283 6309	CERAMIC	1U Z 10V
C309	403 164 0204	CERAMIC	0.1U Z 25V	C3229	403 283 6309	CERAMIC	1U Z 10V
C3101	403 164 0204	CERAMIC	0.1U Z 25V	C323	403 164 0204	CERAMIC	0.1U Z 25V
C3102	403 164 0204	CERAMIC	0.1U Z 25V	C3231	403 283 6309	CERAMIC	1U Z 10V
C3103	403 164 0204	CERAMIC	0.1U Z 25V	C3232	403 283 6309	CERAMIC	1U Z 10V
C3104	403 149 9208	CERAMIC	0.01U Z 50V	C3236	403 283 6309	CERAMIC	1U Z 10V
C3106	403 304 2105	ELECT	47U M 6.3V	C3237	403 283 6309	CERAMIC	1U Z 10V
C3107	403 343 8809	CERAMIC	0.47U Z 16V	C3238	403 341 3905	POS-SOLID	100U M 6.3V
C3108	403 304 2105	ELECT	47U M 6.3V	C3239	403 283 6309	CERAMIC	1U Z 10V
C3109	403 343 8809	CERAMIC	0.47U Z 16V	C324	403 164 0204	CERAMIC	0.1U Z 25V
C311	403 164 0204	CERAMIC	0.1U Z 25V	C3241	403 164 0204	CERAMIC	0.1U Z 25V
C3111	403 164 0204	CERAMIC	0.1U Z 25V	C3242	403 283 6309	CERAMIC	1U Z 10V
C3112	403 164 0204	CERAMIC	0.1U Z 25V	C3243	403 298 9609	CERAMIC	0.1U K 16V
C3113	403 164 0204	CERAMIC	0.1U Z 25V		403 325 3303	CERAMIC	0.1U K 16V
C3114	403 162 5300	ELECT	4.7U M 25V	C3244	403 113 3805	CERAMIC	1000P K 50V
C3116	403 304 2105	ELECT	47U M 6.3V	C3247	403 283 6309	CERAMIC	1U Z 10V
C3117	403 164 0204	CERAMIC	0.1U Z 25V	C3248	403 283 6309	CERAMIC	1U Z 10V
C312	403 164 0204	CERAMIC	0.1U Z 25V	C3249	403 283 6309	CERAMIC	1U Z 10V
C3121	403 139 7702	CERAMIC	7P D 50V	C3251	403 164 0204	CERAMIC	0.1U Z 25V
C3122	403 164 0204	CERAMIC	0.1U Z 25V	C3252	403 164 0204	CERAMIC	0.1U Z 25V
C3123	403 149 9208	CERAMIC	0.01U Z 50V	C3253	403 304 1801	ELECT	100U M 6.3V
C3124	403 162 6000	ELECT	0.47U M 50V		403 373 7704	ELECT	100U M 6.3V
C3126	403 164 0204	CERAMIC	0.1U Z 25V	C3254	403 164 0204	CERAMIC	0.1U Z 25V
C3127	403 149 9208	CERAMIC	0.01U Z 50V	C3255	403 164 0204	CERAMIC	0.1U Z 25V
C3128	403 164 0204	CERAMIC	0.1U Z 25V	C3256	403 304 1801	ELECT	100U M 6.3V
C3129	403 164 0204	CERAMIC	0.1U Z 25V		403 373 7704	ELECT	100U M 6.3V
C313	403 164 0204	CERAMIC	0.1U Z 25V	C3257	403 164 0204	CERAMIC	0.1U Z 25V
C3131	403 284 4304	CERAMIC	0.022U K 50V	C3258	403 164 0204	CERAMIC	0.1U Z 25V
C3132	403 162 6604	ELECT	2.2U M 50V	C3259	403 304 1801	ELECT	100U M 6.3V
C3133	403 113 3805	CERAMIC	1000P K 50V		403 373 7704	ELECT	100U M 6.3V
C3134	403 157 2901	CERAMIC	47P J 50V	C326	403 149 9208	CERAMIC	0.01U Z 50V
C3135	403 322 7809	ELECT	220U M 6.3V	C3262	403 283 6309	CERAMIC	1U Z 10V
C3136	403 164 0204	CERAMIC	0.1U Z 25V	C3263	403 283 6309	CERAMIC	1U Z 10V
C3137	403 164 0204	CERAMIC	0.1U Z 25V	C3264	403 283 6309	CERAMIC	1U Z 10V
C3138	403 280 0805	ELECT	330U M 6.3V	C3266	403 283 6309	CERAMIC	1U Z 10V
C3139	403 341 3905	POS-SOLID	100U M 6.3V	C3267	403 283 6309	CERAMIC	1U Z 10V
C314	403 164 0204	CERAMIC	0.1U Z 25V	C3268	403 283 6309	CERAMIC	1U Z 10V
C315	403 164 0204	CERAMIC	0.1U Z 25V	C3269	403 283 6309	CERAMIC	1U Z 10V
C316	403 164 0204	CERAMIC	0.1U Z 25V	C329	403 164 0204	CERAMIC	0.1U Z 25V
C317	403 164 0204	CERAMIC	0.1U Z 25V	C3291	403 283 6309	CERAMIC	1U Z 10V
C3171	403 283 6309	CERAMIC	1U Z 10V	C3292	403 113 3805	CERAMIC	1000P K 50V
C3172	403 164 0204	CERAMIC	0.1U Z 25V	C3293	403 283 6309	CERAMIC	1U Z 10V
C3176	403 164 0204	CERAMIC	0.1U Z 25V	C3294	403 304 1801	ELECT	100U M 6.3V
C3177	403 164 0204	CERAMIC	0.1U Z 25V		403 373 7704	ELECT	100U M 6.3V
C3178	403 164 0204	CERAMIC	0.1U Z 25V	C341	403 304 2105	ELECT	47U M 6.3V
C318	403 164 0204	CERAMIC	0.1U Z 25V	C342	403 164 0204	CERAMIC	0.1U Z 25V
C3181	403 321 2607	ELECT	10U M 16V	C343	403 164 0204	CERAMIC	0.1U Z 25V
C3182	403 215 2201	CERAMIC	0.01U K 50V	C3501	403 229 3508	ELECT	100U M 16V
C319	403 164 0204	CERAMIC	0.1U Z 25V		403 335 0408	ELECT	100U M 16V
C3191	403 145 9905	CERAMIC	22P J 50V	C3502	403 164 0204	CERAMIC	0.1U Z 25V
C3192	403 233 3808	CERAMIC	10P C 50V	C3503	403 164 0204	CERAMIC	0.1U Z 25V

Electrical Parts List

Key No.	Part No.	Description			Key No.	Part No.	Description		
C3504	403 164 0204	CERAMIC	0.1U Z	25V	C4134	403 215 2201	CERAMIC	0.01U K	50V
C351	403 304 2105	ELECT	47U M	6.3V	C4136	403 215 2201	CERAMIC	0.01U K	50V
C352	403 164 0204	CERAMIC	0.1U Z	25V	C4137	403 215 2201	CERAMIC	0.01U K	50V
C3531	403 229 3508	ELECT	100U M	16V	C4138	403 215 2201	CERAMIC	0.01U K	50V
	403 335 0408	ELECT	100U M	16V	C4139	403 215 2201	CERAMIC	0.01U K	50V
C3532	403 164 0204	CERAMIC	0.1U Z	25V	C414	403 164 0204	CERAMIC	0.1U Z	25V
C3533	403 164 0204	CERAMIC	0.1U Z	25V	C4141	403 215 2201	CERAMIC	0.01U K	50V
C3534	403 164 0204	CERAMIC	0.1U Z	25V	C4142	403 215 2201	CERAMIC	0.01U K	50V
C3541	403 164 0204	CERAMIC	0.1U Z	25V	C4143	403 215 2201	CERAMIC	0.01U K	50V
C3542	403 164 0204	CERAMIC	0.1U Z	25V	C4144	403 215 2201	CERAMIC	0.01U K	50V
C3561	403 229 3508	ELECT	100U M	16V	C4146	403 215 2201	CERAMIC	0.01U K	50V
	403 335 0408	ELECT	100U M	16V	C4147	403 215 2201	CERAMIC	0.01U K	50V
C3562	403 164 0204	CERAMIC	0.1U Z	25V	C4152	403 283 6309	CERAMIC	1U Z	10V
C3563	403 164 0204	CERAMIC	0.1U Z	25V	C4157	403 298 9609	CERAMIC	0.1U K	16V
C3564	403 164 0204	CERAMIC	0.1U Z	25V	C4158	403 298 9609	CERAMIC	0.1U K	16V
C3571	403 164 0204	CERAMIC	0.1U Z	25V	C4159	403 298 9609	CERAMIC	0.1U K	16V
C3572	403 164 0204	CERAMIC	0.1U Z	25V	C416	403 164 0204	CERAMIC	0.1U Z	25V
C361	403 164 0204	CERAMIC	0.1U Z	25V	C4161	403 298 9609	CERAMIC	0.1U K	16V
C362	403 164 0204	CERAMIC	0.1U Z	25V	C4162	403 215 2201	CERAMIC	0.01U K	50V
C368	403 233 3808	CERAMIC	10P C	50V	C4163	403 321 2607	ELECT	10U M	16V
C369	403 233 3808	CERAMIC	10P C	50V	C4164	403 298 9609	CERAMIC	0.1U K	16V
C391	403 164 0204	CERAMIC	0.1U Z	25V	C4166	403 215 2201	CERAMIC	0.01U K	50V
C392	403 304 1801	ELECT	100U M	6.3V	C4167	403 215 2201	CERAMIC	0.01U K	50V
	403 373 7704	ELECT	100U M	6.3V	C4168	403 215 2201	CERAMIC	0.01U K	50V
C393	403 164 0204	CERAMIC	0.1U Z	25V	C4169	403 215 2201	CERAMIC	0.01U K	50V
C394	403 304 1801	ELECT	100U M	6.3V	C417	403 164 0204	CERAMIC	0.1U Z	25V
	403 373 7704	ELECT	100U M	6.3V	C4171	403 215 2201	CERAMIC	0.01U K	50V
C395	403 164 0204	CERAMIC	0.1U Z	25V	C4172	403 215 2201	CERAMIC	0.01U K	50V
C396	403 347 5507	POS-SOLID	470U M	4V	C4173	403 321 2607	ELECT	10U M	16V
C401	403 304 1801	ELECT	100U M	6.3V	C4176	403 162 6000	ELECT	0.47U M	50V
	403 373 7704	ELECT	100U M	6.3V	C4177	403 215 2201	CERAMIC	0.01U K	50V
C402	403 164 0204	CERAMIC	0.1U Z	25V	C4178	403 215 2201	CERAMIC	0.01U K	50V
C403	403 304 1801	ELECT	100U M	6.3V	C4179	403 215 2201	CERAMIC	0.01U K	50V
	403 373 7704	ELECT	100U M	6.3V	C418	403 164 0204	CERAMIC	0.1U Z	25V
C404	403 164 0204	CERAMIC	0.1U Z	25V	C4184	403 175 4802	NP-ELECT	10U M	10V
C406	403 164 0204	CERAMIC	0.1U Z	25V	C4186	403 298 9609	CERAMIC	0.1U K	16V
C407	403 164 0204	CERAMIC	0.1U Z	25V	C419	403 164 0204	CERAMIC	0.1U Z	25V
C408	403 164 0204	CERAMIC	0.1U Z	25V	C4201	403 164 0204	CERAMIC	0.1U Z	25V
C409	403 164 0204	CERAMIC	0.1U Z	25V	C4202	403 304 1801	ELECT	100U M	6.3V
C4100	403 229 3508	ELECT	100U M	16V		403 373 7704	ELECT	100U M	6.3V
C4101	403 164 0204	CERAMIC	0.1U Z	25V	C4203	403 164 0204	CERAMIC	0.1U Z	25V
C4103	403 229 3508	ELECT	100U M	16V	C4204	403 164 0204	CERAMIC	0.1U Z	25V
C4104	403 343 8809	CERAMIC	0.47U Z	16V	C4206	403 164 0204	CERAMIC	0.1U Z	25V
C4105	403 351 1106	POS-SOLID	47U M	16V	C421	403 164 0204	CERAMIC	0.1U Z	25V
C4106	403 280 1604	ELECT	220U M	16V	C4211	403 164 0204	CERAMIC	0.1U Z	25V
C4107	403 343 8809	CERAMIC	0.47U Z	16V	C4212	403 304 1801	ELECT	100U M	6.3V
C4108	403 229 3508	ELECT	100U M	16V		403 373 7704	ELECT	100U M	6.3V
C4109	403 343 8809	CERAMIC	0.47U Z	16V	C4213	403 164 0204	CERAMIC	0.1U Z	25V
C411	403 164 0204	CERAMIC	0.1U Z	25V	C4214	403 164 0204	CERAMIC	0.1U Z	25V
C4111	403 298 9609	CERAMIC	0.1U K	16V	C4216	403 164 0204	CERAMIC	0.1U Z	25V
C4112	403 298 9609	CERAMIC	0.1U K	16V	C4217	403 164 0204	CERAMIC	0.1U Z	25V
C4113	403 298 9609	CERAMIC	0.1U K	16V	C4218	403 164 0204	CERAMIC	0.1U Z	25V
C4116	403 298 9609	CERAMIC	0.1U K	16V	C4219	403 164 0204	CERAMIC	0.1U Z	25V
C4117	403 298 9609	CERAMIC	0.1U K	16V	C422	403 164 0204	CERAMIC	0.1U Z	25V
C4118	403 298 9609	CERAMIC	0.1U K	16V	C4221	403 164 0204	CERAMIC	0.1U Z	25V
C412	403 164 0204	CERAMIC	0.1U Z	25V	C4222	403 164 0204	CERAMIC	0.1U Z	25V
C4121	403 215 2201	CERAMIC	0.01U K	50V	C4223	403 164 0204	CERAMIC	0.1U Z	25V
C4122	403 215 2201	CERAMIC	0.01U K	50V	C4224	403 164 0204	CERAMIC	0.1U Z	25V
C4123	403 215 2201	CERAMIC	0.01U K	50V	C4226	403 164 0204	CERAMIC	0.1U Z	25V
C4124	403 215 2201	CERAMIC	0.01U K	50V	C4227	403 164 0204	CERAMIC	0.1U Z	25V
C4127	403 215 2201	CERAMIC	0.01U K	50V	C4228	403 164 0204	CERAMIC	0.1U Z	25V
C4128	403 215 2201	CERAMIC	0.01U K	50V	C4229	403 164 0204	CERAMIC	0.1U Z	25V
C4129	403 215 2201	CERAMIC	0.01U K	50V	C423	403 164 0204	CERAMIC	0.1U Z	25V
C413	403 164 0204	CERAMIC	0.1U Z	25V	C4230	403 164 0204	CERAMIC	0.1U Z	25V
C4131	403 215 2201	CERAMIC	0.01U K	50V	C4231	403 304 2105	ELECT	47U M	6.3V
C4132	403 215 2201	CERAMIC	0.01U K	50V	C4233	403 164 0204	CERAMIC	0.1U Z	25V
C4133	403 215 2201	CERAMIC	0.01U K	50V	C4234	403 304 2105	ELECT	47U M	6.3V

Electrical Parts List

Key No.	Part No.	Description		Key No.	Part No.	Description	
C4236	403 164 0204	CERAMIC	0.1U Z 25V	C533	403 164 0204	CERAMIC	0.1U Z 25V
C4237	403 155 1609	CERAMIC	33P J 50V	C534	403 164 0204	CERAMIC	0.1U Z 25V
C4238	403 157 7302	CERAMIC	6800P K 50V	C535	403 164 0204	CERAMIC	0.1U Z 25V
C4239	403 304 2105	ELECT	47U M 6.3V	C536	403 164 0204	CERAMIC	0.1U Z 25V
C4241	403 164 0204	CERAMIC	0.1U Z 25V	C537	403 164 0204	CERAMIC	0.1U Z 25V
C4246	403 164 0204	CERAMIC	0.1U Z 25V	C538	403 164 0204	CERAMIC	0.1U Z 25V
C4247	403 164 0204	CERAMIC	0.1U Z 25V	C539	403 304 3300	ELECT	47U M 16V
C4251	403 304 1801	ELECT	100U M 6.3V	C541	403 164 0204	CERAMIC	0.1U Z 25V
	403 373 7704	ELECT	100U M 6.3V	C542	403 164 0204	CERAMIC	0.1U Z 25V
C4252	403 164 0204	CERAMIC	0.1U Z 25V	C546	403 164 0204	CERAMIC	0.1U Z 25V
C4253	403 164 0204	CERAMIC	0.1U Z 25V	C547	403 149 9208	CERAMIC	0.01U Z 50V
C4262	403 164 0204	CERAMIC	0.1U Z 25V	C561	403 304 1801	ELECT	100U M 6.3V
C4263	403 164 0204	CERAMIC	0.1U Z 25V		403 373 7704	ELECT	100U M 6.3V
C4272	403 164 0204	CERAMIC	0.1U Z 25V	C562	403 164 0204	CERAMIC	0.1U Z 25V
C4273	403 164 0204	CERAMIC	0.1U Z 25V	C563	403 164 0204	CERAMIC	0.1U Z 25V
C4281	403 164 0204	CERAMIC	0.1U Z 25V	C564	403 164 0204	CERAMIC	0.1U Z 25V
C451	403 304 1801	ELECT	100U M 6.3V	C565	403 164 0204	CERAMIC	0.1U Z 25V
	403 373 7704	ELECT	100U M 6.3V	C566	403 164 0204	CERAMIC	0.1U Z 25V
C452	403 164 0204	CERAMIC	0.1U Z 25V	C567	403 164 0204	CERAMIC	0.1U Z 25V
C453	403 304 1801	ELECT	100U M 6.3V	C568	403 164 0204	CERAMIC	0.1U Z 25V
	403 373 7704	ELECT	100U M 6.3V	C569	403 304 3300	ELECT	47U M 16V
C454	403 164 0204	CERAMIC	0.1U Z 25V	C571	403 164 0204	CERAMIC	0.1U Z 25V
C4801	403 164 0204	CERAMIC	0.1U Z 25V	C572	403 164 0204	CERAMIC	0.1U Z 25V
C4802	403 164 0204	CERAMIC	0.1U Z 25V	C576	403 164 0204	CERAMIC	0.1U Z 25V
C4803	403 164 0204	CERAMIC	0.1U Z 25V	C577	403 149 9208	CERAMIC	0.01U Z 50V
C4804	403 164 0204	CERAMIC	0.1U Z 25V	C6101	403 298 9609	CERAMIC	0.1U K 16V
C4813	403 304 1801	ELECT	100U M 6.3V	C6121	403 275 3002	CERAMIC	0.047U K 16V
	403 373 7704	ELECT	100U M 6.3V	C6122	403 275 3002	CERAMIC	0.047U K 16V
C4814	403 164 0204	CERAMIC	0.1U Z 25V	C6123	403 298 9609	CERAMIC	0.1U K 16V
C4821	403 164 0204	CERAMIC	0.1U Z 25V	C6124	403 322 7809	ELECT	220U M 6.3V
C4822	403 164 0204	CERAMIC	0.1U Z 25V	C6131	403 298 9609	CERAMIC	0.1U K 16V
C4831	403 164 0204	CERAMIC	0.1U Z 25V	C6136	403 275 3002	CERAMIC	0.047U K 16V
C4836	403 164 0204	CERAMIC	0.1U Z 25V	C6137	403 155 1302	CERAMIC	150P J 50V
C4881	403 322 7809	ELECT	220U M 6.3V	C6161	403 298 9609	CERAMIC	0.1U K 16V
C4882	403 298 9609	CERAMIC	0.1U K 16V	C6188	403 298 9609	CERAMIC	0.1U K 16V
C4883	403 322 7809	ELECT	220U M 6.3V	C6191	403 298 9609	CERAMIC	0.1U K 16V
C4884	403 298 9609	CERAMIC	0.1U K 16V	C6192	403 298 9609	CERAMIC	0.1U K 16V
C4891	403 298 9609	CERAMIC	0.1U K 16V	C6194	403 215 2201	CERAMIC	0.01U K 50V
C4892	403 298 9609	CERAMIC	0.1U K 16V	C6196	403 229 3508	ELECT	100U M 16V
C501	403 304 1801	ELECT	100U M 6.3V	C6197	403 229 3508	ELECT	100U M 16V
	403 373 7704	ELECT	100U M 6.3V	C6198	403 298 9609	CERAMIC	0.1U K 16V
C502	403 164 0204	CERAMIC	0.1U Z 25V	C6199	403 162 6604	ELECT	2.2U M 50V
C503	403 164 0204	CERAMIC	0.1U Z 25V	C6301	403 164 0204	CERAMIC	0.1U Z 25V
C504	403 164 0204	CERAMIC	0.1U Z 25V	C6302	403 304 1801	ELECT	100U M 6.3V
C505	403 164 0204	CERAMIC	0.1U Z 25V	C6303	403 164 0204	CERAMIC	0.1U Z 25V
C506	403 164 0204	CERAMIC	0.1U Z 25V	C6304	403 113 3805	CERAMIC	1000P K 50V
C507	403 164 0204	CERAMIC	0.1U Z 25V	C6306	403 164 0204	CERAMIC	0.1U Z 25V
C508	403 164 0204	CERAMIC	0.1U Z 25V	C6307	403 164 0204	CERAMIC	0.1U Z 25V
C509	403 304 3300	ELECT	47U M 16V	C6308	403 164 0204	CERAMIC	0.1U Z 25V
C511	403 164 0204	CERAMIC	0.1U Z 25V	C6309	403 164 0204	CERAMIC	0.1U Z 25V
C512	403 164 0204	CERAMIC	0.1U Z 25V	C6311	403 164 0204	CERAMIC	0.1U Z 25V
C516	403 164 0204	CERAMIC	0.1U Z 25V	C6312	403 113 3805	CERAMIC	1000P K 50V
C5166	403 164 0204	CERAMIC	0.1U Z 25V	C6313	403 164 0204	CERAMIC	0.1U Z 25V
C5167	403 304 3102	ELECT	22U M 16V	C6314	403 113 3805	CERAMIC	1000P K 50V
C517	403 149 9208	CERAMIC	0.01U Z 50V	C6316	403 164 0204	CERAMIC	0.1U Z 25V
C5197	403 321 2607	ELECT	10U M 16V	C6321	403 164 0204	CERAMIC	0.1U Z 25V
C5201	403 266 8900	NP-ELECT	22U M 16V	C6322	403 304 1801	ELECT	100U M 6.3V
C5212	401 105 7909	MT-GLAZE	0.000 ZA 1/16W	C6323	403 164 0204	CERAMIC	0.1U Z 25V
C5231	403 266 8900	NP-ELECT	22U M 16V	C6324	403 113 3805	CERAMIC	1000P K 50V
C5242	401 105 7909	MT-GLAZE	0.000 ZA 1/16W	C6326	403 164 0204	CERAMIC	0.1U Z 25V
C5244	403 164 0204	CERAMIC	0.1U Z 25V	C6327	403 164 0204	CERAMIC	0.1U Z 25V
C5261	403 266 8900	NP-ELECT	22U M 16V	C6328	403 164 0204	CERAMIC	0.1U Z 25V
C5272	401 105 7909	MT-GLAZE	0.000 ZA 1/16W	C6329	403 164 0204	CERAMIC	0.1U Z 25V
C5296	403 298 9609	CERAMIC	0.1U K 16V	C6331	403 164 0204	CERAMIC	0.1U Z 25V
C531	403 304 1801	ELECT	100U M 6.3V	C6332	403 113 3805	CERAMIC	1000P K 50V
	403 373 7704	ELECT	100U M 6.3V	C6333	403 164 0204	CERAMIC	0.1U Z 25V
C532	403 164 0204	CERAMIC	0.1U Z 25V	C6334	403 113 3805	CERAMIC	1000P K 50V

Electrical Parts List

Key No.	Part No.	Description
C6336	403 164 0204	CERAMIC 0.1U Z 25V
C6341	403 164 0204	CERAMIC 0.1U Z 25V
C6342	403 304 1801	ELECT 100U M 6.3V
C6343	403 164 0204	CERAMIC 0.1U Z 25V
C6344	403 113 3805	CERAMIC 1000P K 50V
C6346	403 164 0204	CERAMIC 0.1U Z 25V
C6347	403 164 0204	CERAMIC 0.1U Z 25V
C6348	403 164 0204	CERAMIC 0.1U Z 25V
C6349	403 164 0204	CERAMIC 0.1U Z 25V
C6351	403 164 0204	CERAMIC 0.1U Z 25V
C6352	403 113 3805	CERAMIC 1000P K 50V
C6353	403 164 0204	CERAMIC 0.1U Z 25V
C6354	403 113 3805	CERAMIC 1000P K 50V
C6356	403 164 0204	CERAMIC 0.1U Z 25V
C6361	403 164 0204	CERAMIC 0.1U Z 25V
C6362	403 304 1801	ELECT 100U M 6.3V
C6363	403 164 0204	CERAMIC 0.1U Z 25V
C6364	403 113 3805	CERAMIC 1000P K 50V
C6366	403 164 0204	CERAMIC 0.1U Z 25V
C6367	403 164 0204	CERAMIC 0.1U Z 25V
C6368	403 164 0204	CERAMIC 0.1U Z 25V
C6369	403 164 0204	CERAMIC 0.1U Z 25V
C6371	403 164 0204	CERAMIC 0.1U Z 25V
C6372	403 113 3805	CERAMIC 1000P K 50V
C6373	403 164 0204	CERAMIC 0.1U Z 25V
C6374	403 113 3805	CERAMIC 1000P K 50V
C6376	403 164 0204	CERAMIC 0.1U Z 25V
C6381	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C6382	403 164 0204	CERAMIC 0.1U Z 25V
C6383	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C6384	403 164 0204	CERAMIC 0.1U Z 25V
C8001	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C8002	403 283 6309	CERAMIC 1U Z 10V
C8003	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C8004	403 283 6309	CERAMIC 1U Z 10V
C8005	403 169 2807	CERAMIC 330P J 50V
C8006	403 283 6309	CERAMIC 1U Z 10V
C8007	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C8008	403 157 3601	CERAMIC 100P J 50V
C8009	403 157 3601	CERAMIC 100P J 50V
C801	403 164 0204	CERAMIC 0.1U Z 25V
C8010	403 157 3601	CERAMIC 100P J 50V
C8011	403 157 3601	CERAMIC 100P J 50V
C8012	403 364 5801	CERAMIC 1U K 10V
C8013	403 364 5801	CERAMIC 1U K 10V
C8014	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C8015	403 283 6309	CERAMIC 1U Z 10V
C8016	403 155 1500	CERAMIC 180P J 50V
C8017	403 169 2807	CERAMIC 330P J 50V
C8018	403 164 0204	CERAMIC 0.1U Z 25V
C8019	403 155 1500	CERAMIC 180P J 50V
C802	403 164 0204	CERAMIC 0.1U Z 25V
C8020	403 164 0204	CERAMIC 0.1U Z 25V
C8021	403 164 0204	CERAMIC 0.1U Z 25V
C8022	403 155 1500	CERAMIC 180P J 50V
C8023	403 164 0204	CERAMIC 0.1U Z 25V
C803	403 155 1609	CERAMIC 33P J 50V
C8031	403 304 2105	ELECT 47U M 6.3V
C8032	403 164 0204	CERAMIC 0.1U Z 25V
C8033	403 164 0204	CERAMIC 0.1U Z 25V
C804	403 155 1609	CERAMIC 33P J 50V

Key No.	Part No.	Description
C8041	403 164 0204	CERAMIC 0.1U Z 25V
C8042	403 164 0204	CERAMIC 0.1U Z 25V
C805	403 164 0204	CERAMIC 0.1U Z 25V
C8051	403 149 9208	CERAMIC 0.01U Z 50V
C8052	403 304 2105	ELECT 47U M 6.3V
C806	403 304 2105	ELECT 47U M 6.3V
C8060	403 322 7809	ELECT 220U M 6.3V
C8061	403 164 0204	CERAMIC 0.1U Z 25V
C8062	403 164 0204	CERAMIC 0.1U Z 25V
C807	403 164 0204	CERAMIC 0.1U Z 25V
C8071	403 164 0204	CERAMIC 0.1U Z 25V
C8072	403 164 0204	CERAMIC 0.1U Z 25V
C808	403 215 1006	CERAMIC 470P J 50V
C8081	403 164 0204	CERAMIC 0.1U Z 25V
C8082	403 164 0204	CERAMIC 0.1U Z 25V
C809	403 283 6309	CERAMIC 1U Z 10V
C8091	403 164 0204	CERAMIC 0.1U Z 25V
C8092	403 164 0204	CERAMIC 0.1U Z 25V
C810	403 164 0204	CERAMIC 0.1U Z 25V
C811	403 164 0204	CERAMIC 0.1U Z 25V
C812	403 164 0204	CERAMIC 0.1U Z 25V
C813	403 164 0204	CERAMIC 0.1U Z 25V
C814	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C815	403 164 0204	CERAMIC 0.1U Z 25V
C816	403 164 0204	CERAMIC 0.1U Z 25V
C817	403 164 0204	CERAMIC 0.1U Z 25V
C818	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C819	403 164 0204	CERAMIC 0.1U Z 25V
C820	403 164 0204	CERAMIC 0.1U Z 25V
C821	403 164 0204	CERAMIC 0.1U Z 25V
C822	403 164 0204	CERAMIC 0.1U Z 25V
C823	403 164 0204	CERAMIC 0.1U Z 25V
C824	403 164 0204	CERAMIC 0.1U Z 25V
C9801	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C9802	403 164 0204	CERAMIC 0.1U Z 25V
C9803	403 153 9102	CERAMIC 5P C 50V
C9804	403 113 3805	CERAMIC 1000P K 50V
C9805	403 298 9609	CERAMIC 0.1U K 16V
C9806	403 164 0204	CERAMIC 0.1U Z 25V
C9807	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C9808	403 164 0204	CERAMIC 0.1U Z 25V
C9809	403 164 0204	CERAMIC 0.1U Z 25V
C9821	403 298 9609	CERAMIC 0.1U K 16V
C9831	403 298 9609	CERAMIC 0.1U K 16V
C9861	403 298 9609	CERAMIC 0.1U K 16V
C9872	403 155 1609	CERAMIC 33P J 50V
C9873	403 155 1609	CERAMIC 33P J 50V
C9881	403 298 9609	CERAMIC 0.1U K 16V
C9882	403 298 9609	CERAMIC 0.1U K 16V
C9892	403 155 1609	CERAMIC 33P J 50V
C9893	403 155 1609	CERAMIC 33P J 50V
RESISTOR		
RB301	645 021 0358	R-NETWORK 100X4 0.063W
RB302	645 021 0358	R-NETWORK 100X4 0.063W
RB303	645 021 0358	R-NETWORK 100X4 0.063W
RB304	645 021 0358	R-NETWORK 100X4 0.063W
RB305	645 021 0358	R-NETWORK 100X4 0.063W
RB306	645 021 0358	R-NETWORK 100X4 0.063W
RB307	645 021 0358	R-NETWORK 100X4 0.063W
RB308	645 021 0358	R-NETWORK 100X4 0.063W
RB309	645 021 0358	R-NETWORK 100X4 0.063W
RB310	645 021 0358	R-NETWORK 100X4 0.063W
RB311	645 021 0358	R-NETWORK 100X4 0.063W

Electrical Parts List

Key No.	Part No.	Description
RB312	645 021 0358	R-NETWORK 100X4 0.063W
RB3501	645 037 3107	R-NETWORK 10X4 0.063W
RB3502	645 037 3107	R-NETWORK 10X4 0.063W
RB3503	645 037 3107	R-NETWORK 10X4 0.063W
RB3531	645 037 3107	R-NETWORK 10X4 0.063W
RB3532	645 037 3107	R-NETWORK 10X4 0.063W
RB3533	645 037 3107	R-NETWORK 10X4 0.063W
RB3561	645 037 3107	R-NETWORK 10X4 0.063W
RB3562	645 037 3107	R-NETWORK 10X4 0.063W
RB3563	645 037 3107	R-NETWORK 10X4 0.063W
RB401	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB402	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB403	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB404	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB406	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB407	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB4801	645 021 0358	R-NETWORK 100X4 0.063W
	645 031 3325	R-NETWORK 100X4 1/16W
RB491	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB492	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB493	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB494	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB496	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB497	645 037 0663	R-NETWORK 22X4 0.063W
	645 021 4943	R-NETWORK 22X4 1/16W
RB501	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB531	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB561	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8001	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8002	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8003	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8004	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8005	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8006	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8007	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8008	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8009	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB801	645 037 4920	R-NETWORK 3.3KX4 0.063W
	645 031 4070	R-NETWORK 3.3KX4 1/16W
RB8010	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8011	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8012	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB8013	645 037 3107	R-NETWORK 10X4 0.063W
	645 028 5981	R-NETWORK 10X4 1/16W
RB802	645 037 4920	R-NETWORK 3.3KX4 0.063W
	645 031 4070	R-NETWORK 3.3KX4 1/16W
RB803	645 037 4920	R-NETWORK 3.3KX4 0.063W
	645 031 4070	R-NETWORK 3.3KX4 1/16W
RB804	645 037 4920	R-NETWORK 3.3KX4 0.063W
	645 031 4070	R-NETWORK 3.3KX4 1/16W
RB9401	645 037 0656	R-NETWORK 0X4 0.063W
RB9402	645 037 0656	R-NETWORK 0X4 0.063W
RB9403	645 037 0656	R-NETWORK 0X4 0.063W
RB9404	645 037 0656	R-NETWORK 0X4 0.063W
RB9406	645 037 0656	R-NETWORK 0X4 0.063W
RB9407	645 037 0656	R-NETWORK 0X4 0.063W
RB9801	645 021 0365	R-NETWORK 100KX4 0.063W
	645 025 5397	R-NETWORK 100KX4 1/16W
RB9802	645 021 0365	R-NETWORK 100KX4 0.063W
	645 025 5397	R-NETWORK 100KX4 1/16W
R1101	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1102	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1103	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1104	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1105	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1106	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1107	401 105 2706	MT-GLAZE 220 JA 1/16W
R1108	401 105 2706	MT-GLAZE 220 JA 1/16W
R1109	401 105 5202	MT-GLAZE 470 JA 1/16W
R1112	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1113	401 105 0702	MT-GLAZE 100K JA 1/16W
R1114	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1115	401 105 0405	MT-GLAZE 100 JA 1/16W
R1116	401 105 0405	MT-GLAZE 100 JA 1/16W
R1117	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1118	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1121	401 105 0504	MT-GLAZE 1K JA 1/16W
R1123	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1124	401 105 0504	MT-GLAZE 1K JA 1/16W
R1126	401 105 0504	MT-GLAZE 1K JA 1/16W
R1127	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R1128	401 105 0603	MT-GLAZE 10K JA 1/16W
R1129	401 105 8104	MT-GLAZE 56K JA 1/16W
R1131	401 105 5400	MT-GLAZE 47K JA 1/16W
R1132	401 105 0504	MT-GLAZE 1K JA 1/16W
R1133	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R1134	401 105 6506	MT-GLAZE 680 JA 1/16W
R1135	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R1136	401 105 2706	MT-GLAZE 220 JA 1/16W
R1137	401 105 6506	MT-GLAZE 680 JA 1/16W
R1139	401 105 5103	MT-GLAZE 47 JA 1/16W
R1141	401 105 0504	MT-GLAZE 1K JA 1/16W
R1142	401 105 8104	MT-GLAZE 56K JA 1/16W
R1143	401 105 5400	MT-GLAZE 47K JA 1/16W
R1144	401 105 0504	MT-GLAZE 1K JA 1/16W
R1145	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R1146	401 105 6506	MT-GLAZE 680 JA 1/16W
R1147	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R1148	401 105 2706	MT-GLAZE 220 JA 1/16W
R1149	401 105 6506	MT-GLAZE 680 JA 1/16W
R1152	401 105 5905	MT-GLAZE 560 JA 1/16W
R1153	401 105 5103	MT-GLAZE 47 JA 1/16W
R1154	401 105 0504	MT-GLAZE 1K JA 1/16W
R1155	401 105 5905	MT-GLAZE 560 JA 1/16W
R1160	401 105 0603	MT-GLAZE 10K JA 1/16W
R1161	401 105 0504	MT-GLAZE 1K JA 1/16W
R1163	401 105 0504	MT-GLAZE 1K JA 1/16W
R1164	401 105 4601	MT-GLAZE 3.9K JA 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R1303	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1834	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1304	401 105 0603	MT-GLAZE 10K JA 1/16W	R1836	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1305	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1842	401 105 0504	MT-GLAZE 1K JA 1/16W
R1307	401 105 0603	MT-GLAZE 10K JA 1/16W	R1843	401 105 0603	MT-GLAZE 10K JA 1/16W
R1308	401 105 0603	MT-GLAZE 10K JA 1/16W	R1844	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1309	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1846	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1313	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1847	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R140	401 105 2003	MT-GLAZE 1.8K JA 1/16W	R1851	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R141	401 105 2904	MT-GLAZE 22K JA 1/16W	R1852	401 105 0603	MT-GLAZE 10K JA 1/16W
R142	401 105 1600	MT-GLAZE 15K JA 1/16W	R1853	401 105 5400	MT-GLAZE 47K JA 1/16W
R143	401 105 0504	MT-GLAZE 1K JA 1/16W	R1856	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R144	401 105 0504	MT-GLAZE 1K JA 1/16W	R1857	401 105 0603	MT-GLAZE 10K JA 1/16W
R145	401 105 4809	MT-GLAZE 390K JA 1/16W	R1858	401 105 5400	MT-GLAZE 47K JA 1/16W
R146	401 105 4106	MT-GLAZE 3.3K JA 1/16W	R1865	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R147	401 105 6001	MT-GLAZE 5.6K JA 1/16W	R1868	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R148	401 105 0405	MT-GLAZE 100 JA 1/16W	R1871	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R149	401 105 0504	MT-GLAZE 1K JA 1/16W	R1872	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1501	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1873	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1502	401 105 0405	MT-GLAZE 100 JA 1/16W	R1874	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1503	401 105 0405	MT-GLAZE 100 JA 1/16W	R1876	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1504	401 105 0405	MT-GLAZE 100 JA 1/16W	R1877	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1506	401 105 0405	MT-GLAZE 100 JA 1/16W	R1880	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1507	401 105 0405	MT-GLAZE 100 JA 1/16W	R1881	401 105 0603	MT-GLAZE 10K JA 1/16W
R1508	401 105 0504	MT-GLAZE 1K JA 1/16W	R1882	401 105 0603	MT-GLAZE 10K JA 1/16W
R1509	401 105 0504	MT-GLAZE 1K JA 1/16W	R1883	401 105 0603	MT-GLAZE 10K JA 1/16W
R151	401 105 6506	MT-GLAZE 680 JA 1/16W	R1884	401 105 0603	MT-GLAZE 10K JA 1/16W
R152	401 105 3307	MT-GLAZE 2.7K JA 1/16W	R1885	401 105 0603	MT-GLAZE 10K JA 1/16W
R1521	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1886	401 105 0603	MT-GLAZE 10K JA 1/16W
R1523	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1887	401 105 0603	MT-GLAZE 10K JA 1/16W
R1527	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1889	401 105 0603	MT-GLAZE 10K JA 1/16W
R153	401 105 0504	MT-GLAZE 1K JA 1/16W	R1891	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R1531	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1892	401 105 0405	MT-GLAZE 100 JA 1/16W
R1532	401 105 0405	MT-GLAZE 100 JA 1/16W	R1893	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R1533	401 105 0405	MT-GLAZE 100 JA 1/16W	R1894	401 105 0405	MT-GLAZE 100 JA 1/16W
R154	401 105 0504	MT-GLAZE 1K JA 1/16W	R1897	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1542	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R1898	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1544	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R2101	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R1547	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R2102	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R155	401 105 0504	MT-GLAZE 1K JA 1/16W	R2103	401 105 0405	MT-GLAZE 100 JA 1/16W
R156	401 105 0504	MT-GLAZE 1K JA 1/16W	R2104	401 105 0405	MT-GLAZE 100 JA 1/16W
R1561	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R2106	401 105 4007	MT-GLAZE 330 JA 1/16W
R1562	401 105 0603	MT-GLAZE 10K JA 1/16W	R2107	401 105 0504	MT-GLAZE 1K JA 1/16W
R1563	401 105 5301	MT-GLAZE 4.7K JA 1/16W	R2108	401 105 0504	MT-GLAZE 1K JA 1/16W
R1564	401 105 0603	MT-GLAZE 10K JA 1/16W	R2109	401 105 0504	MT-GLAZE 1K JA 1/16W
R157	401 105 0504	MT-GLAZE 1K JA 1/16W	R211	401 105 0405	MT-GLAZE 100 JA 1/16W
R158	401 105 2706	MT-GLAZE 220 JA 1/16W	R2111	401 105 0504	MT-GLAZE 1K JA 1/16W
R159	401 105 3000	MT-GLAZE 220K JA 1/16W	R2112	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R1591	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R2113	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R161	401 105 5400	MT-GLAZE 47K JA 1/16W	R214	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R162	401 105 0504	MT-GLAZE 1K JA 1/16W	R216	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R163	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R217	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R164	401 105 5202	MT-GLAZE 470 JA 1/16W	R221	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R165	401 105 5301	MT-GLAZE 4.7K JA 1/16W	R223	401 105 0306	MT-GLAZE 10 JA 1/16W
R1801	401 105 0603	MT-GLAZE 10K JA 1/16W	R224	401 105 0306	MT-GLAZE 10 JA 1/16W
R1802	401 105 0603	MT-GLAZE 10K JA 1/16W	R226	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R1804	401 105 0603	MT-GLAZE 10K JA 1/16W	R228	401 105 0603	MT-GLAZE 10K JA 1/16W
R1805	401 105 0405	MT-GLAZE 100 JA 1/16W	R229	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R1806	401 105 0405	MT-GLAZE 100 JA 1/16W	R231	401 105 0405	MT-GLAZE 100 JA 1/16W
R1807	401 105 0405	MT-GLAZE 100 JA 1/16W	R232	401 105 0405	MT-GLAZE 100 JA 1/16W
R1811	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R233	401 105 0405	MT-GLAZE 100 JA 1/16W
R1812	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R234	401 105 0405	MT-GLAZE 100 JA 1/16W
R1813	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R239	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R1814	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R2501	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R1816	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R2502	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R1817	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R2503	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R1823	401 105 0603	MT-GLAZE 10K JA 1/16W	R2504	401 105 0603	MT-GLAZE 10K JA 1/16W
R1833	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R2511	401 105 2805	MT-GLAZE 2.2K JA 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R2512	401 105 4700	MT-GLAZE 39K JA 1/16W	R3122	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2513	401 105 4601	MT-GLAZE 3.9K JA 1/16W	R3123	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2514	401 105 0504	MT-GLAZE 1K JA 1/16W	R3124	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2516	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3125	401 177 2406	MT-GLAZE 10M JA 1/16W
R2517	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3128	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R2518	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3129	401 177 2406	MT-GLAZE 10M JA 1/16W
R2519	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R313	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2532	401 105 0504	MT-GLAZE 1K JA 1/16W	R3131	401 105 3406	MT-GLAZE 27K JA 1/16W
R2533	401 105 0504	MT-GLAZE 1K JA 1/16W	R3132	401 105 7503	MT-GLAZE 82K JA 1/16W
R2536	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3133	401 105 1006	MT-GLAZE 1.2K JA 1/16W
R2538	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3134	401 105 0504	MT-GLAZE 1K JA 1/16W
R2541	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R3136	401 105 0504	MT-GLAZE 1K JA 1/16W
R2542	401 105 4700	MT-GLAZE 39K JA 1/16W	R3137	401 105 0405	MT-GLAZE 100 JA 1/16W
R2543	401 105 4601	MT-GLAZE 3.9K JA 1/16W	R3139	401 105 0504	MT-GLAZE 1K JA 1/16W
R2544	401 105 0504	MT-GLAZE 1K JA 1/16W	R314	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2546	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3141	401 105 5905	MT-GLAZE 560 JA 1/16W
R2547	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3142	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R2548	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3143	401 105 0603	MT-GLAZE 10K JA 1/16W
R2549	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3144	401 105 5905	MT-GLAZE 560 JA 1/16W
R2561	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R3145	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R2562	401 105 0504	MT-GLAZE 1K JA 1/16W	R3146	401 105 0603	MT-GLAZE 10K JA 1/16W
R2571	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R3147	401 105 5905	MT-GLAZE 560 JA 1/16W
R2572	401 105 4700	MT-GLAZE 39K JA 1/16W	R3148	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R2573	401 105 4601	MT-GLAZE 3.9K JA 1/16W	R3149	401 105 0603	MT-GLAZE 10K JA 1/16W
R2574	401 105 0504	MT-GLAZE 1K JA 1/16W	R315	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2576	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3151	401 105 0504	MT-GLAZE 1K JA 1/16W
R2577	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3152	401 105 0504	MT-GLAZE 1K JA 1/16W
R2578	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3153	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2579	401 148 6006	MT-GLAZE 2.2 JA 1/16W	R3154	401 105 0504	MT-GLAZE 1K JA 1/16W
R2592	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3155	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R2593	401 105 4205	MT-GLAZE 33K JA 1/16W	R3156	401 105 0504	MT-GLAZE 1K JA 1/16W
R2594	401 105 0603	MT-GLAZE 10K JA 1/16W	R316	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R261	401 105 0504	MT-GLAZE 1K JA 1/16W	R3160	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R262	401 105 0405	MT-GLAZE 100 JA 1/16W	R3161	401 105 6605	MT-GLAZE 6.8K JA 1/16W
R263	401 105 0504	MT-GLAZE 1K JA 1/16W	R317	401 105 0306	MT-GLAZE 10 JA 1/16W
R264	401 105 0504	MT-GLAZE 1K JA 1/16W	R3171	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R265	401 105 0405	MT-GLAZE 100 JA 1/16W	R3172	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R266	401 105 0504	MT-GLAZE 1K JA 1/16W	R3173	401 105 0504	MT-GLAZE 1K JA 1/16W
R267	401 105 0504	MT-GLAZE 1K JA 1/16W	R3174	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R268	401 105 0405	MT-GLAZE 100 JA 1/16W	R3175	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R269	401 105 0504	MT-GLAZE 1K JA 1/16W	R3176	401 105 0504	MT-GLAZE 1K JA 1/16W
R271	401 105 0405	MT-GLAZE 100 JA 1/16W	R3177	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R272	401 105 0405	MT-GLAZE 100 JA 1/16W	R3178	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R273	401 105 0603	MT-GLAZE 10K JA 1/16W	R3179	401 105 0504	MT-GLAZE 1K JA 1/16W
R274	401 105 5202	MT-GLAZE 470 JA 1/16W	R318	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R277	401 105 0405	MT-GLAZE 100 JA 1/16W	R3181	401 105 0504	MT-GLAZE 1K JA 1/16W
R281	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3182	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R282	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3183	401 105 0702	MT-GLAZE 100K JA 1/16W
R283	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3184	401 105 0504	MT-GLAZE 1K JA 1/16W
R300	401 038 3504	MT-GLAZE 330 JA 1/10W	R3191	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R301	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3192	401 105 0405	MT-GLAZE 100 JA 1/16W
R304	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3194	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R308	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3195	401 105 0405	MT-GLAZE 100 JA 1/16W
R3101	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3197	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R3102	401 105 6605	MT-GLAZE 6.8K JA 1/16W	R3198	401 105 0405	MT-GLAZE 100 JA 1/16W
R3104	401 105 0405	MT-GLAZE 100 JA 1/16W	R320	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3106	401 105 0405	MT-GLAZE 100 JA 1/16W	R3200	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3107	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3201	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3108	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3202	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R311	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3203	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3114	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3204	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3116	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3205	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3117	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3211	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3118	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3212	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3119	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3213	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R312	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3214	401 105 0405	MT-GLAZE 100 JA 1/16W
R3121	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3216	401 105 7909	MT-GLAZE 0.000 ZA 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R3217	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3546	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3218	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3547	401 105 0306	MT-GLAZE 10 JA 1/16W
R322	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R356	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3221	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3562	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3222	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3564	401 105 0603	MT-GLAZE 10K JA 1/16W
R3223	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3566	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3226	401 105 4601	MT-GLAZE 3.9K JA 1/16W	R3568	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3227	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R357	401 105 5103	MT-GLAZE 47 JA 1/16W
R3228	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3571	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3229	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R3572	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3231	401 105 0306	MT-GLAZE 10 JA 1/16W	R3574	401 105 0504	MT-GLAZE 1K JA 1/16W
R3232	401 105 0306	MT-GLAZE 10 JA 1/16W	R3576	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3233	401 105 0306	MT-GLAZE 10 JA 1/16W	R3577	401 105 0306	MT-GLAZE 10 JA 1/16W
R3236	401 105 0405	MT-GLAZE 100 JA 1/16W	R358	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3241	401 105 0504	MT-GLAZE 1K JA 1/16W	R359	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3242	401 105 0504	MT-GLAZE 1K JA 1/16W	R361	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3246	401 105 1105	MT-GLAZE 12K JA 1/16W	R362	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3247	401 105 0306	MT-GLAZE 10 JA 1/16W	R364	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3248	401 219 1008	MT-GLAZE 1.6K FA 1/16W	R366	401 105 0603	MT-GLAZE 10K JA 1/16W
R3249	401 105 0603	MT-GLAZE 10K JA 1/16W	R367	401 105 3208	MT-GLAZE 270 JA 1/16W
R326	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R368	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3262	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R369	401 105 0603	MT-GLAZE 10K JA 1/16W
R3266	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R370	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3267	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R371	401 105 0603	MT-GLAZE 10K JA 1/16W
R3268	401 105 0603	MT-GLAZE 10K JA 1/16W	R373	401 105 0603	MT-GLAZE 10K JA 1/16W
R3269	401 105 2003	MT-GLAZE 1.8K JA 1/16W	R375	401 105 2607	MT-GLAZE 22 JA 1/16W
R327	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R376	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3271	401 105 0405	MT-GLAZE 100 JA 1/16W	R379	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3272	401 105 0504	MT-GLAZE 1K JA 1/16W	R382	401 105 2607	MT-GLAZE 22 JA 1/16W
R3273	401 105 4502	MT-GLAZE 390 JA 1/16W	R385	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3274	401 105 0405	MT-GLAZE 100 JA 1/16W	R387	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3275	401 105 0504	MT-GLAZE 1K JA 1/16W	R388	401 105 0603	MT-GLAZE 10K JA 1/16W
R3276	401 105 4502	MT-GLAZE 390 JA 1/16W	R389	401 105 0603	MT-GLAZE 10K JA 1/16W
R3277	401 105 0405	MT-GLAZE 100 JA 1/16W	R390	401 225 5601	MT-GLAZE 2.2 JA 1W
R3278	401 105 0504	MT-GLAZE 1K JA 1/16W	R392	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3279	401 105 4502	MT-GLAZE 390 JA 1/16W	R394	401 105 0603	MT-GLAZE 10K JA 1/16W
R328	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R396	401 105 0603	MT-GLAZE 10K JA 1/16W
R3292	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R398	401 105 0603	MT-GLAZE 10K JA 1/16W
R3294	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R399	401 225 5601	MT-GLAZE 2.2 JA 1W
R3296	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R401	401 105 2607	MT-GLAZE 22 JA 1/16W
R3298	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R402	401 105 2607	MT-GLAZE 22 JA 1/16W
R332	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R403	401 105 2607	MT-GLAZE 22 JA 1/16W
R333	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R404	401 105 2607	MT-GLAZE 22 JA 1/16W
R334	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R406	401 105 2607	MT-GLAZE 22 JA 1/16W
R336	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R407	401 105 2607	MT-GLAZE 22 JA 1/16W
R337	401 105 0603	MT-GLAZE 10K JA 1/16W	R4101	401 105 0306	MT-GLAZE 10 JA 1/16W
R338	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4102	401 105 0306	MT-GLAZE 10 JA 1/16W
R341	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4103	401 105 0306	MT-GLAZE 10 JA 1/16W
R342	401 105 2003	MT-GLAZE 1.8K JA 1/16W	R411	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R343	401 105 2003	MT-GLAZE 1.8K JA 1/16W	R4111	401 105 0405	MT-GLAZE 100 JA 1/16W
R344	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4112	401 105 0405	MT-GLAZE 100 JA 1/16W
R345	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4113	401 217 4100	MT-GLAZE 22K FA 1/16W
R3502	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4116	401 105 0405	MT-GLAZE 100 JA 1/16W
R3504	401 105 0603	MT-GLAZE 10K JA 1/16W	R4117	401 105 0405	MT-GLAZE 100 JA 1/16W
R3506	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R412	401 105 3901	MT-GLAZE 33 JA 1/16W
R351	401 105 0405	MT-GLAZE 100 JA 1/16W	R4121	401 105 8104	MT-GLAZE 56K JA 1/16W
R3516	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4122	401 105 8104	MT-GLAZE 56K JA 1/16W
R3517	401 105 0306	MT-GLAZE 10 JA 1/16W	R4123	401 105 0405	MT-GLAZE 100 JA 1/16W
R352	401 105 0603	MT-GLAZE 10K JA 1/16W	R4124	401 105 0405	MT-GLAZE 100 JA 1/16W
R3532	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4126	401 105 0405	MT-GLAZE 100 JA 1/16W
R3534	401 105 0603	MT-GLAZE 10K JA 1/16W	R413	401 105 3901	MT-GLAZE 33 JA 1/16W
R3536	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R414	401 105 3901	MT-GLAZE 33 JA 1/16W
R3538	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4151	401 105 5202	MT-GLAZE 470 JA 1/16W
R354	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4152	401 105 5400	MT-GLAZE 47K JA 1/16W
R3541	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R416	401 105 3901	MT-GLAZE 33 JA 1/16W
R3542	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4161	401 114 0908	MT-GLAZE 3.3M JA 1/16W
R3544	401 105 0504	MT-GLAZE 1K JA 1/16W	R4163	401 105 0603	MT-GLAZE 10K JA 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R4164	401 105 0603	MT-GLAZE 10K JA 1/16W	R4286	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4166	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4287	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4167	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4288	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4168	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4289	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R417	401 105 3901	MT-GLAZE 33 JA 1/16W	R429	401 105 3901	MT-GLAZE 33 JA 1/16W
R4171	401 105 0405	MT-GLAZE 100 JA 1/16W	R431	401 105 3901	MT-GLAZE 33 JA 1/16W
R4173	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R432	401 105 3901	MT-GLAZE 33 JA 1/16W
R4176	401 105 0405	MT-GLAZE 100 JA 1/16W	R433	401 105 3901	MT-GLAZE 33 JA 1/16W
R4177	401 105 0405	MT-GLAZE 100 JA 1/16W	R434	401 105 3901	MT-GLAZE 33 JA 1/16W
R418	401 105 3901	MT-GLAZE 33 JA 1/16W	R436	401 105 3901	MT-GLAZE 33 JA 1/16W
R4184	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R437	401 105 3901	MT-GLAZE 33 JA 1/16W
R4186	401 105 0405	MT-GLAZE 100 JA 1/16W	R438	401 105 3901	MT-GLAZE 33 JA 1/16W
R4187	401 105 0405	MT-GLAZE 100 JA 1/16W	R439	401 105 3901	MT-GLAZE 33 JA 1/16W
R4188	401 105 0504	MT-GLAZE 1K JA 1/16W	R441	401 105 3901	MT-GLAZE 33 JA 1/16W
R4189	401 105 3000	MT-GLAZE 220K JA 1/16W	R442	401 105 3901	MT-GLAZE 33 JA 1/16W
R419	401 105 3901	MT-GLAZE 33 JA 1/16W	R443	401 105 3901	MT-GLAZE 33 JA 1/16W
R4191	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R444	401 105 3901	MT-GLAZE 33 JA 1/16W
R4192	401 105 1006	MT-GLAZE 1.2K JA 1/16W	R446	401 105 3901	MT-GLAZE 33 JA 1/16W
R4193	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R447	401 105 3901	MT-GLAZE 33 JA 1/16W
R4201	401 105 4106	MT-GLAZE 3.3K JA 1/16W	R448	401 105 3901	MT-GLAZE 33 JA 1/16W
R4202	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R449	401 105 3901	MT-GLAZE 33 JA 1/16W
R4207	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R451	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4208	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R461	401 105 3901	MT-GLAZE 33 JA 1/16W
R4209	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R462	401 105 3901	MT-GLAZE 33 JA 1/16W
R421	401 105 3901	MT-GLAZE 33 JA 1/16W	R463	401 105 3901	MT-GLAZE 33 JA 1/16W
R4211	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R464	401 105 3901	MT-GLAZE 33 JA 1/16W
R4213	401 105 0603	MT-GLAZE 10K JA 1/16W	R466	401 105 3901	MT-GLAZE 33 JA 1/16W
R4214	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R467	401 105 3901	MT-GLAZE 33 JA 1/16W
R4218	401 105 0405	MT-GLAZE 100 JA 1/16W	R468	401 105 3901	MT-GLAZE 33 JA 1/16W
R422	401 105 3901	MT-GLAZE 33 JA 1/16W	R471	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4221	401 105 3901	MT-GLAZE 33 JA 1/16W	R472	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4222	401 105 3901	MT-GLAZE 33 JA 1/16W	R473	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4226	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R474	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4227	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R476	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4228	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R477	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4229	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R478	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R423	401 105 3901	MT-GLAZE 33 JA 1/16W	R4801	401 105 0603	MT-GLAZE 10K JA 1/16W
R4230	401 105 0405	MT-GLAZE 100 JA 1/16W	R4802	401 105 0405	MT-GLAZE 100 JA 1/16W
R4231	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4803	401 105 0603	MT-GLAZE 10K JA 1/16W
R4232	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4804	401 105 0405	MT-GLAZE 100 JA 1/16W
R4235	401 105 0405	MT-GLAZE 100 JA 1/16W	R4805	401 105 0603	MT-GLAZE 10K JA 1/16W
R4236	401 105 0405	MT-GLAZE 100 JA 1/16W	R4806	401 105 0405	MT-GLAZE 100 JA 1/16W
R424	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4807	401 105 0504	MT-GLAZE 1K JA 1/16W
R4241	401 105 0306	MT-GLAZE 10 JA 1/16W	R4808	401 105 0504	MT-GLAZE 1K JA 1/16W
R4243	401 105 6605	MT-GLAZE 6.8K JA 1/16W	R4809	401 105 5202	MT-GLAZE 470 JA 1/16W
R4246	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R481	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4248	401 113 4600	MT-GLAZE 110 JA 1/16W	R4811	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R4251	401 113 4600	MT-GLAZE 110 JA 1/16W	R4812	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R4252	401 105 0306	MT-GLAZE 10 JA 1/16W	R4814	401 105 0405	MT-GLAZE 100 JA 1/16W
R4253	401 105 0306	MT-GLAZE 10 JA 1/16W	R4815	401 105 2904	MT-GLAZE 22K JA 1/16W
R4254	401 113 5003	MT-GLAZE 240 JA 1/16W	R4816	401 105 5202	MT-GLAZE 470 JA 1/16W
R4256	401 113 5003	MT-GLAZE 240 JA 1/16W	R4817	401 105 0405	MT-GLAZE 100 JA 1/16W
R426	401 105 3901	MT-GLAZE 33 JA 1/16W	R4818	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R4263	401 105 0405	MT-GLAZE 100 JA 1/16W	R482	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4264	401 105 0306	MT-GLAZE 10 JA 1/16W	R4822	401 105 0603	MT-GLAZE 10K JA 1/16W
R4265	403 155 4600	CERAMIC 4P C 50V	R4823	401 105 4502	MT-GLAZE 390 JA 1/16W
R4268	401 105 0405	MT-GLAZE 100 JA 1/16W	R4824	401 105 4502	MT-GLAZE 390 JA 1/16W
R4269	401 105 0306	MT-GLAZE 10 JA 1/16W	R4825	401 105 4502	MT-GLAZE 390 JA 1/16W
R427	401 105 3901	MT-GLAZE 33 JA 1/16W	R4826	401 105 2904	MT-GLAZE 22K JA 1/16W
R4274	401 105 0405	MT-GLAZE 100 JA 1/16W	R4827	401 105 2904	MT-GLAZE 22K JA 1/16W
R4275	401 105 0306	MT-GLAZE 10 JA 1/16W	R4828	401 105 0405	MT-GLAZE 100 JA 1/16W
R428	401 105 3901	MT-GLAZE 33 JA 1/16W	R4829	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4281	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4831	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4282	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4834	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R4283	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4835	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4284	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4844	401 105 0405	MT-GLAZE 100 JA 1/16W
R4285	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R4845	401 105 0405	MT-GLAZE 100 JA 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R4847	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R5216	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4849	401 105 0405	MT-GLAZE 100 JA 1/16W	R5217	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4850	401 105 0405	MT-GLAZE 100 JA 1/16W	R5231	401 105 1808	MT-GLAZE 18 JA 1/16W
R4851	401 105 0405	MT-GLAZE 100 JA 1/16W	R5232	401 105 5806	MT-GLAZE 56 JA 1/16W
R4852	401 105 0405	MT-GLAZE 100 JA 1/16W	R5234	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4853	401 105 0306	MT-GLAZE 10 JA 1/16W	R5236	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4854	401 105 0306	MT-GLAZE 10 JA 1/16W	R5243	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4855	401 105 2904	MT-GLAZE 22K JA 1/16W	R5246	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4856	401 105 2904	MT-GLAZE 22K JA 1/16W	R5247	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4857	401 105 0405	MT-GLAZE 100 JA 1/16W	R5261	401 105 1808	MT-GLAZE 18 JA 1/16W
R4858	401 105 0405	MT-GLAZE 100 JA 1/16W	R5262	401 105 5806	MT-GLAZE 56 JA 1/16W
R4859	401 105 0603	MT-GLAZE 10K JA 1/16W	R5264	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4860	401 105 0405	MT-GLAZE 100 JA 1/16W	R5266	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4861	401 037 5004	MT-GLAZE 0.000 ZA 1/10W	R5273	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4862	401 037 6704	MT-GLAZE 1.2K JA 1/10W	R5276	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4863	401 105 1006	MT-GLAZE 1.2K JA 1/16W	R5277	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4865	401 036 1403	MT-GLAZE 220 JA 1/8W	R534	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4876	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R536	401 105 0504	MT-GLAZE 1K JA 1/16W
R4877	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R537	401 105 0306	MT-GLAZE 10 JA 1/16W
R4878	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R538	401 105 0306	MT-GLAZE 10 JA 1/16W
R4879	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R541	401 105 0603	MT-GLAZE 10K JA 1/16W
R4881	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R542	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R4882	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R543	401 105 3406	MT-GLAZE 27K JA 1/16W
R4883	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R546	401 105 2102	MT-GLAZE 18K JA 1/16W
R4886	401 105 0405	MT-GLAZE 100 JA 1/16W	R547	401 105 0603	MT-GLAZE 10K JA 1/16W
R4887	401 105 0405	MT-GLAZE 100 JA 1/16W	R548	401 105 0603	MT-GLAZE 10K JA 1/16W
R4891	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R564	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4892	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R566	401 105 0504	MT-GLAZE 1K JA 1/16W
R4893	401 105 0405	MT-GLAZE 100 JA 1/16W	R567	401 105 0306	MT-GLAZE 10 JA 1/16W
R4894	401 105 3307	MT-GLAZE 2.7K JA 1/16W	R568	401 105 0306	MT-GLAZE 10 JA 1/16W
R4896	401 105 0504	MT-GLAZE 1K JA 1/16W	R571	401 105 0603	MT-GLAZE 10K JA 1/16W
R4899	401 105 0603	MT-GLAZE 10K JA 1/16W	R572	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R491	401 105 2607	MT-GLAZE 22 JA 1/16W	R573	401 105 3406	MT-GLAZE 27K JA 1/16W
R492	401 105 2607	MT-GLAZE 22 JA 1/16W	R576	401 105 2102	MT-GLAZE 18K JA 1/16W
R493	401 105 2607	MT-GLAZE 22 JA 1/16W	R577	401 105 0603	MT-GLAZE 10K JA 1/16W
R494	401 105 2607	MT-GLAZE 22 JA 1/16W	R578	401 105 0603	MT-GLAZE 10K JA 1/16W
R496	401 105 2607	MT-GLAZE 22 JA 1/16W	R6103	401 105 0405	MT-GLAZE 100 JA 1/16W
R497	401 105 2607	MT-GLAZE 22 JA 1/16W	R6104	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R498	401 105 2904	MT-GLAZE 22K JA 1/16W	R6107	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R499	401 105 2904	MT-GLAZE 22K JA 1/16W	R6108	401 105 0405	MT-GLAZE 100 JA 1/16W
R504	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R6111	401 105 0405	MT-GLAZE 100 JA 1/16W
R506	401 105 0504	MT-GLAZE 1K JA 1/16W	R6113	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R507	401 105 0306	MT-GLAZE 10 JA 1/16W	R6116	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R508	401 105 0306	MT-GLAZE 10 JA 1/16W	R6118	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5102	401 105 0405	MT-GLAZE 100 JA 1/16W	R6122	401 105 0405	MT-GLAZE 100 JA 1/16W
R5103	401 105 0405	MT-GLAZE 100 JA 1/16W	R6124	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5104	401 105 0405	MT-GLAZE 100 JA 1/16W	R6126	401 105 1105	MT-GLAZE 12K JA 1/16W
R511	401 105 0603	MT-GLAZE 10K JA 1/16W	R6127	401 105 0603	MT-GLAZE 10K JA 1/16W
R512	401 105 5301	MT-GLAZE 4.7K JA 1/16W	R6128	401 105 0405	MT-GLAZE 100 JA 1/16W
R513	401 105 3406	MT-GLAZE 27K JA 1/16W	R6131	401 105 0405	MT-GLAZE 100 JA 1/16W
R5131	401 105 0504	MT-GLAZE 1K JA 1/16W	R6134	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5132	401 105 0603	MT-GLAZE 10K JA 1/16W	R6136	401 105 0603	MT-GLAZE 10K JA 1/16W
R5133	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R6137	401 105 1600	MT-GLAZE 15K JA 1/16W
R5136	401 105 0504	MT-GLAZE 1K JA 1/16W	R6141	401 105 0702	MT-GLAZE 100K JA 1/16W
R516	401 105 2102	MT-GLAZE 18K JA 1/16W	R6142	401 105 0702	MT-GLAZE 100K JA 1/16W
R5165	403 139 7504	CERAMIC 39P J 50V	R6143	401 105 0702	MT-GLAZE 100K JA 1/16W
R5168	401 105 3307	MT-GLAZE 2.7K JA 1/16W	R6144	401 105 2102	MT-GLAZE 18K JA 1/16W
R5169	401 105 6605	MT-GLAZE 6.8K JA 1/16W	R6146	401 105 0603	MT-GLAZE 10K JA 1/16W
R517	401 105 0603	MT-GLAZE 10K JA 1/16W	R6147	401 105 0504	MT-GLAZE 1K JA 1/16W
R5175	403 139 7504	CERAMIC 39P J 50V	R6151	401 105 0603	MT-GLAZE 10K JA 1/16W
R518	401 105 0603	MT-GLAZE 10K JA 1/16W	R6152	401 105 0405	MT-GLAZE 100 JA 1/16W
R5185	403 139 7504	CERAMIC 39P J 50V	R6153	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R5201	401 105 1808	MT-GLAZE 18 JA 1/16W	R6154	401 105 0405	MT-GLAZE 100 JA 1/16W
R5202	401 105 5806	MT-GLAZE 56 JA 1/16W	R6164	401 105 0504	MT-GLAZE 1K JA 1/16W
R5204	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R6166	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5206	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R6167	401 105 0504	MT-GLAZE 1K JA 1/16W
R5213	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R6169	401 105 7909	MT-GLAZE 0.000 ZA 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R6171	401 105 0603	MT-GLAZE 10K JA 1/16W	R8096	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6172	401 105 3307	MT-GLAZE 2.7K JA 1/16W	R811	401 105 0603	MT-GLAZE 10K JA 1/16W
R6174	401 105 0504	MT-GLAZE 1K JA 1/16W	R812	401 105 0603	MT-GLAZE 10K JA 1/16W
R6176	401 105 0504	MT-GLAZE 1K JA 1/16W	R813	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6177	401 105 3307	MT-GLAZE 2.7K JA 1/16W	R815	401 105 0405	MT-GLAZE 100 JA 1/16W
R6178	401 105 0504	MT-GLAZE 1K JA 1/16W	R816	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R6179	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R817	401 105 0405	MT-GLAZE 100 JA 1/16W
R6180	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R818	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R6181	401 105 0405	MT-GLAZE 100 JA 1/16W	R819	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6182	401 105 0405	MT-GLAZE 100 JA 1/16W	R820	401 202 8205	MT-GLAZE 3K FA 1/16W
R6183	401 105 0405	MT-GLAZE 100 JA 1/16W	R821	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6184	401 105 0405	MT-GLAZE 100 JA 1/16W	R822	401 105 0603	MT-GLAZE 10K JA 1/16W
R6185	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R823	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6187	401 105 6001	MT-GLAZE 5.6K JA 1/16W	R824	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R6188	401 113 5201	MT-GLAZE 360 JA 1/16W	R825	401 105 4502	MT-GLAZE 390 JA 1/16W
R6189	401 158 4108	MT-GLAZE 4.7 JA 1/16W	R826	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R6193	401 105 4106	MT-GLAZE 3.3K JA 1/16W	R827	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6194	401 105 0603	MT-GLAZE 10K JA 1/16W	R828	401 105 2904	MT-GLAZE 22K JA 1/16W
R6196	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R829	401 105 2904	MT-GLAZE 22K JA 1/16W
R6197	401 105 0405	MT-GLAZE 100 JA 1/16W	R831	401 105 0900	MT-GLAZE 120 JA 1/16W
R6198	401 105 0405	MT-GLAZE 100 JA 1/16W	R832	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R6199	401 105 0405	MT-GLAZE 100 JA 1/16W	R833	401 105 0603	MT-GLAZE 10K JA 1/16W
R6381	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R835	401 105 0603	MT-GLAZE 10K JA 1/16W
R6384	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R836	401 105 0603	MT-GLAZE 10K JA 1/16W
R800	401 105 0603	MT-GLAZE 10K JA 1/16W	R837	401 105 0603	MT-GLAZE 10K JA 1/16W
R8001	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R838	401 105 0603	MT-GLAZE 10K JA 1/16W
R8002	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R843	401 105 0504	MT-GLAZE 1K JA 1/16W
R8003	401 105 4007	MT-GLAZE 330 JA 1/16W	R844	401 105 0405	MT-GLAZE 100 JA 1/16W
R8004	401 105 3109	MT-GLAZE 27 JA 1/16W	R845	401 105 0603	MT-GLAZE 10K JA 1/16W
R8005	401 105 4205	MT-GLAZE 33K JA 1/16W	R846	401 105 0603	MT-GLAZE 10K JA 1/16W
R8006	401 105 4205	MT-GLAZE 33K JA 1/16W	R848	401 105 2904	MT-GLAZE 22K JA 1/16W
R8008	401 105 4106	MT-GLAZE 3.3K JA 1/16W	R849	401 105 2904	MT-GLAZE 22K JA 1/16W
R8009	401 105 4205	MT-GLAZE 33K JA 1/16W	R851	401 105 2904	MT-GLAZE 22K JA 1/16W
R801	401 105 5301	MT-GLAZE 4.7K JA 1/16W	R854	401 105 0603	MT-GLAZE 10K JA 1/16W
R8010	401 105 4205	MT-GLAZE 33K JA 1/16W	R855	401 105 0405	MT-GLAZE 100 JA 1/16W
R8011	401 105 4205	MT-GLAZE 33K JA 1/16W	R856	401 105 2003	MT-GLAZE 1.8K JA 1/16W
R8013	401 105 4106	MT-GLAZE 3.3K JA 1/16W	R857	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R8015	401 113 6406	MT-GLAZE 5.1K JA 1/16W	R858	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8016	401 113 6406	MT-GLAZE 5.1K JA 1/16W	R861	401 105 0603	MT-GLAZE 10K JA 1/16W
R8018	401 113 6406	MT-GLAZE 5.1K JA 1/16W	R863	401 105 0603	MT-GLAZE 10K JA 1/16W
R802	401 105 5301	MT-GLAZE 4.7K JA 1/16W	R864	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R8020	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R865	401 105 0603	MT-GLAZE 10K JA 1/16W
R803	401 105 0405	MT-GLAZE 100 JA 1/16W	R866	401 105 0405	MT-GLAZE 100 JA 1/16W
R8031	401 105 0405	MT-GLAZE 100 JA 1/16W	R867	401 105 0405	MT-GLAZE 100 JA 1/16W
R8032	401 105 0405	MT-GLAZE 100 JA 1/16W	R868	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8033	401 105 0603	MT-GLAZE 10K JA 1/16W	R869	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8034	401 105 0603	MT-GLAZE 10K JA 1/16W	R871	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8036	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R872	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8037	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R873	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8039	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R874	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R804	401 105 0405	MT-GLAZE 100 JA 1/16W	R875	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8041	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R876	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8042	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R877	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8043	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R878	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8044	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R879	401 105 0603	MT-GLAZE 10K JA 1/16W
R8046	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R881	401 105 0603	MT-GLAZE 10K JA 1/16W
R8047	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R882	401 105 0603	MT-GLAZE 10K JA 1/16W
R8048	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R883	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8049	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R884	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8052	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R885	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8056	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R886	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R806	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R887	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R808	401 105 0405	MT-GLAZE 100 JA 1/16W	R889	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R809	401 105 0405	MT-GLAZE 100 JA 1/16W	R890	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8091	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R891	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8092	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R892	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8093	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	R893	401 105 7909	MT-GLAZE 0.000 ZA 1/16W

Key No.	Part No.	Description
R894	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R895	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R896	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R897	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R898	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R899	401 105 0603	MT-GLAZE 10K JA 1/16W
R9401	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9402	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9403	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9404	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9406	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9407	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9801	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R9803	401 105 8005	MT-GLAZE 1M JA 1/16W
R9804	401 105 0405	MT-GLAZE 100 JA 1/16W
R9805	401 105 0405	MT-GLAZE 100 JA 1/16W
R9806	401 105 0405	MT-GLAZE 100 JA 1/16W
R9807	401 105 0405	MT-GLAZE 100 JA 1/16W
R9808	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9812	401 105 5400	MT-GLAZE 47K JA 1/16W
R9813	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9814	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9821	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9822	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9824	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9825	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9831	401 105 0603	MT-GLAZE 10K JA 1/16W
R9861	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9862	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9863	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9864	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9866	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9867	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9868	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9869	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9870	401 105 8005	MT-GLAZE 1M JA 1/16W
R9871	401 105 0405	MT-GLAZE 100 JA 1/16W
R9872	401 105 0405	MT-GLAZE 100 JA 1/16W
R9873	401 105 0405	MT-GLAZE 100 JA 1/16W
R9874	401 105 0405	MT-GLAZE 100 JA 1/16W
R9875	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9876	401 105 0405	MT-GLAZE 100 JA 1/16W
R9877	401 105 0405	MT-GLAZE 100 JA 1/16W
R9878	401 105 0405	MT-GLAZE 100 JA 1/16W
R9879	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9881	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9882	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9883	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9884	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9886	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9887	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9888	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9889	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9890	401 105 8005	MT-GLAZE 1M JA 1/16W
R9891	401 105 0405	MT-GLAZE 100 JA 1/16W
R9892	401 105 0405	MT-GLAZE 100 JA 1/16W
R9893	401 105 0405	MT-GLAZE 100 JA 1/16W
R9894	401 105 0405	MT-GLAZE 100 JA 1/16W
R9895	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R9896	401 105 0405	MT-GLAZE 100 JA 1/16W
R9897	401 105 0405	MT-GLAZE 100 JA 1/16W
R9898	401 105 0405	MT-GLAZE 100 JA 1/16W
R9899	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
TRANSFORMER		
T1151	645 044 3626	FILTER,LP 7MHZ
T1161	645 044 3626	FILTER,LP 7MHZ
T161	645 044 3626	FILTER,LP 7MHZ

Key No.	Part No.	Description
COIL		
L1101	645 026 0964	INDUCTOR,10U K
L1102	645 026 0964	INDUCTOR,10U K
L1103	645 026 0964	INDUCTOR,10U K
L1104	645 026 0971	INDUCTOR,15U K
L1105	645 026 0964	INDUCTOR,10U K
L1151	645 026 1008	INDUCTOR,3.3U M
L1161	645 021 1607	INDUCTOR,10U J
L140	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L1501	645 026 1008	INDUCTOR,3.3U M
L1531	645 026 1008	INDUCTOR,3.3U M
L201	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L2101	645 021 1669	INDUCTOR,22U J
L2102	645 021 1737	INDUCTOR,47U J
L2103	645 021 1737	INDUCTOR,47U J
L2116	645 017 4520	INDUCTOR,100U J
L2501	401 035 4306	MT-GLAZE 10 JA 1/8W
L2511	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L281	645 020 1776	INDUCTOR,3.3U M
L3101	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L3102	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L3103	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L3191	645 021 1607	INDUCTOR,10U J
L3194	645 021 1669	INDUCTOR,22U J
L3197	645 021 1669	INDUCTOR,22U J
L3291	645 026 1008	INDUCTOR,3.3U M
L3501	645 020 1776	INDUCTOR,3.3U M
L3531	645 020 1776	INDUCTOR,3.3U M
L3561	645 020 1776	INDUCTOR,3.3U M
L401	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L4101	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L4201	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L4231	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L4251	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L4881	645 020 1776	INDUCTOR,3.3U M
L501	645 020 1776	INDUCTOR,3.3U M
L502	645 020 1776	INDUCTOR,3.3U M
L5166	645 026 0964	INDUCTOR,10U K
L5191	645 026 0964	INDUCTOR,10U K
L531	645 020 1776	INDUCTOR,3.3U M
L532	645 020 1776	INDUCTOR,3.3U M
L561	645 020 1776	INDUCTOR,3.3U M
L562	645 020 1776	INDUCTOR,3.3U M
L6301	645 001 4512	INDUCTOR,10U K
L8001	645 026 0988	INDUCTOR,2.2U M
L8002	645 026 0988	INDUCTOR,2.2U M
L8003	645 026 0988	INDUCTOR,2.2U M
L8004	645 026 0988	INDUCTOR,2.2U M
L8041	645 020 1776	INDUCTOR,3.3U M
L8061	645 020 1776	INDUCTOR,3.3U M
L9801	645 021 1645	INDUCTOR,2.2U J
DIODE		
D1101	407 149 0807	DIODE 1SS355-TE-17
D1102	407 149 0807	DIODE 1SS355-TE-17
D1161	407 149 0807	DIODE 1SS355-TE-17
D1561	407 149 0807	DIODE 1SS355-TE-17
D1571	407 149 0807	DIODE 1SS355-TE-17
D241	407 149 0807	DIODE 1SS355-TE-17
D242	407 149 0807	DIODE 1SS355-TE-17
D243	407 149 0807	DIODE 1SS355-TE-17
D2501	407 149 0807	DIODE 1SS355-TE-17
D3102	407 149 0807	DIODE 1SS355-TE-17
D3103	407 149 0807	DIODE 1SS355-TE-17
D3251	407 149 0807	DIODE 1SS355-TE-17
D3252	407 149 0807	DIODE 1SS355-TE-17
D3253	407 149 0807	DIODE 1SS355-TE-17

Key No.	Part No.	Description
D451	407 149 0807	DIODE 1SS355-TE-17
D4801	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D4802	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D4803	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D4804	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D4805	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D4806	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D4807	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D4808	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D4809	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D4811	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D4812	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D4813	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D4814	407 149 0807	DIODE 1SS355-TE-17
D4891	407 149 0807	DIODE 1SS355-TE-17
D6121	407 149 0807	DIODE 1SS355-TE-17
D6122	407 149 0807	DIODE 1SS355-TE-17
D6136	407 149 0807	DIODE 1SS355-TE-17
D6137	407 149 0807	DIODE 1SS355-TE-17
D6138	407 149 0807	DIODE 1SS355-TE-17
D6139	407 149 0807	DIODE 1SS355-TE-17
D6161	407 149 0807	DIODE 1SS355-TE-17
D6176	407 149 0807	DIODE 1SS355-TE-17
D6381	407 149 0807	DIODE 1SS355-TE-17
D8001	407 149 0807	DIODE 1SS355-TE-17
D801	407 149 0807	DIODE 1SS355-TE-17
D8031	407 149 0807	DIODE 1SS355-TE-17
D8032	407 149 0807	DIODE 1SS355-TE-17
MISCELLANEOUS		
X1101	645 045 9122	OSC,CRYSTAL 20MHZ
X3101	645 047 1568	OSC,CRYSTAL 16.200MHZ
X361	645 047 6587	OSC,CRYSTAL 26.000MHZ
X362	645 047 6587	OSC,CRYSTAL 26.000MHZ
X6181	645 053 7677	OSC,CERAMIC 503.0KHZ
X801	645 053 4973	OSC,CRYSTAL 6.4512MHZ
X9801	645 035 8906	OSC,CRYSTAL 48MHZ
X9871	645 035 2249	OSC,CRYSTAL 6.7584MHZ
X9891	645 035 2249	OSC,CRYSTAL 6.7584MHZ

TEMP.SENSOR BOARD

610 301 1950 ASSY,PWB,TEMP.SENSOR MC3A

INTEGRATED CIRCUIT			
IC2821	409 481 8602	IC LM76CHMX-5	
CAPACITOR			
C2821	403 164 0204	CERAMIC	0.1U Z 25V
C2822	403 157 3809	CERAMIC	120P J 50V
C2823	403 155 1609	CERAMIC	33P J 50V
C2824	403 205 7803	TA-SOLID	2.2U M 16V
RESISTOR			
R2822	401 105 0306	MT-GLAZE	10 JA 1/16W
R2823	401 105 0306	MT-GLAZE	10 JA 1/16W
R2824	401 105 7909	MT-GLAZE	0.000 ZA 1/16W
R2827	401 105 7909	MT-GLAZE	0.000 ZA 1/16W

AUDIO BOARD

610 302 6435 ASSY,PWB,AUDIO MC3A

Key No.	Part No.	Description
TRANSISTOR		
Q011	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q013	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q014	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q031	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5501	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5531	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5561	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
INTEGRATED CIRCUIT		
IC001	409 341 4102	IC BA7655AF
IC002	409 416 6505	IC BA05FP-E2
IC031	410 445 4400	IC TDA1517ATW/N1
IC5501	409 362 1104	IC BA6287F
IC5531	409 362 1104	IC BA6287F
IC5561	409 537 6200	IC BA6920FP-Y-E2

Key No.	Part No.	Description
IC5581	409 404 6302	IC M62320FP
CAPACITOR		
C001	403 304 2105	ELECT 47U M 6.3V
C002	403 298 9609	CERAMIC 0.1U K 16V
C003	403 298 9609	CERAMIC 0.1U K 16V
C004	403 298 9609	CERAMIC 0.1U K 16V
C005	403 298 9609	CERAMIC 0.1U K 16V
C006	403 215 2201	CERAMIC 0.01U K 50V
C007	403 229 3508	ELECT 100U M 16V
C008	403 341 7507	ELECT 100U M 25V
C009	403 283 6309	CERAMIC 1U Z 10V
C011	403 283 6309	CERAMIC 1U Z 10V
C012	403 175 4109	ELECT 22U M 16V
C031	403 343 4900	ELECT 470U M 25V
C032	403 343 4900	ELECT 470U M 25V
C033	403 164 0204	CERAMIC 0.1U Z 25V
C034	403 215 2201	CERAMIC 0.01U K 50V
C036	403 341 7507	ELECT 100U M 25V
C037	403 281 5205	CERAMIC 0.22U Z 16V
C038	403 281 5205	CERAMIC 0.22U Z 16V
C041	403 343 4900	ELECT 470U M 25V
C042	403 343 4900	ELECT 470U M 25V
C043	403 343 4900	ELECT 470U M 25V
C044	403 343 4900	ELECT 470U M 25V
C5501	403 149 9208	CERAMIC 0.01U Z 50V
C5504	403 164 0204	CERAMIC 0.1U Z 25V
C5531	403 149 9208	CERAMIC 0.01U Z 50V
C5534	403 164 0204	CERAMIC 0.1U Z 25V
C5561	403 149 9208	CERAMIC 0.01U Z 50V
C5564	403 164 0204	CERAMIC 0.1U Z 25V
C5581	403 164 0204	CERAMIC 0.1U Z 25V
C5582	403 304 1801	ELECT 100U M 6.3V
C5583	403 164 0204	CERAMIC 0.1U Z 25V
C5601	403 342 9104	ELECT 680U M 16V
C5606	403 342 9104	ELECT 680U M 16V
C5611	403 342 9104	ELECT 680U M 16V
RESISTOR		
R001	401 276 4707	MT-GLAZE 0.000 ZA 1/3W
R002	401 276 4707	MT-GLAZE 0.000 ZA 1/3W
R003	401 105 0504	MT-GLAZE 1K JA 1/16W
R006	401 105 0405	MT-GLAZE 100 JA 1/16W
R007	401 105 0405	MT-GLAZE 100 JA 1/16W
R011	401 105 0405	MT-GLAZE 100 JA 1/16W
R012	401 105 0504	MT-GLAZE 1K JA 1/16W
R013	401 105 0405	MT-GLAZE 100 JA 1/16W
R014	401 105 0504	MT-GLAZE 1K JA 1/16W
R016	401 105 0504	MT-GLAZE 1K JA 1/16W
R017	401 105 0405	MT-GLAZE 100 JA 1/16W
R018	401 105 0504	MT-GLAZE 1K JA 1/16W
R019	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R021	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R022	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R023	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R024	401 105 2904	MT-GLAZE 22K JA 1/16W
R026	401 105 4205	MT-GLAZE 33K JA 1/16W
R027	401 105 0306	MT-GLAZE 10 JA 1/16W
R028	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R031	401 102 7407	MT-GLAZE 10 JA 1W
R032	401 102 7407	MT-GLAZE 10 JA 1W
R033	401 105 0603	MT-GLAZE 10K JA 1/16W
R034	401 113 6406	MT-GLAZE 5.1K JA 1/16W
R036	401 105 0504	MT-GLAZE 1K JA 1/16W
R037	401 102 7407	MT-GLAZE 10 JA 1W
R5501	401 105 0504	MT-GLAZE 1K JA 1/16W
R5502	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5503	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5504	401 036 9904	MT-GLAZE 560 JA 1/8W
R5506	401 105 0504	MT-GLAZE 1K JA 1/16W
R5507	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5509	401 102 7407	MT-GLAZE 10 JA 1W
R5531	401 105 0504	MT-GLAZE 1K JA 1/16W
R5532	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5533	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5534	401 036 9904	MT-GLAZE 560 JA 1/8W
R5536	401 105 0504	MT-GLAZE 1K JA 1/16W
R5537	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5561	401 105 0504	MT-GLAZE 1K JA 1/16W
R5562	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5563	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5564	401 036 9904	MT-GLAZE 560 JA 1/8W
R5566	401 105 0504	MT-GLAZE 1K JA 1/16W
R5567	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R5569	401 203 1106	MT-GLAZE 8.2 JA 1W
R5572	401 105 0504	MT-GLAZE 1K JA 1/16W
R5573	401 203 1106	MT-GLAZE 8.2 JA 1W
R5581	401 105 0405	MT-GLAZE 100 JA 1/16W
R5582	401 105 0405	MT-GLAZE 100 JA 1/16W
R5601	401 290 1508	MT-GLAZE 0.1 JE 1/2W
R5602	401 105 0603	MT-GLAZE 10K JA 1/16W
R5606	401 290 1508	MT-GLAZE 0.1 JE 1/2W
R5607	401 105 0603	MT-GLAZE 10K JA 1/16W
R5611	401 290 1508	MT-GLAZE 0.1 JE 1/2W
R5612	401 105 0603	MT-GLAZE 10K JA 1/16W
DIODE		
D031	407 149 0807	DIODE 1SS355-TE-17
D5501	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D5502	407 149 0807	DIODE 1SS355-TE-17
D5531	407 179 0501	ZENER DIODE UDZ6.2B-TE-17
D5561	407 187 8308	ZENER DIODE UDZ13B-TE-17
D5562	407 149 0807	DIODE 1SS355-TE-17
D5601	407 149 0807	DIODE 1SS355-TE-17
D5606	407 149 0807	DIODE 1SS355-TE-17
D5611	407 149 0807	DIODE 1SS355-TE-17
D5612	407 149 0807	DIODE 1SS355-TE-17

COM BOARD

610 306 0279 ASSY,PWB,COM. MC3AB

TRANSISTOR		
Q3021	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3028	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3029	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0

Electrical Parts List

Key No.	Part No.	Description
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3031	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q3032	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q3051	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3052	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3053	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3054	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3081	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q7001	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q7231	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q7311	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S

INTEGRATED CIRCUIT

IC3001	409 462 6009	IC AD8185ARU
IC3021	409 526 5306	IC BD7600FV
IC3022	409 526 5306	IC BD7600FV
IC4001	409 461 7403	IC LT1399CS
IC4002	410 349 4100	IC TC7W241FU(TE12L)
IC7001	409 334 0104	IC TC7W125FU
IC7002	409 428 8405	IC TC7WT125FU-TE12L
IC7004	409 462 2407	IC TC7SZ08FU-(TE85L)
IC7201	409 484 2003	IC BA7078AF-E2
IC7221	410 343 7008	IC SN74AHCT1G14DBVR
IC7226	410 343 7008	IC SN74AHCT1G14DBVR
IC7301	409 051 2900	IC TC4053BF(EL)
IC7302	409 462 0304	IC 24LC21AT/SN

CAPACITOR

C3001	403 164 0204	CERAMIC	0.1U Z	25V
C3002	403 164 0204	CERAMIC	0.1U Z	25V
C3003	403 355 4608	ELECT	47U M	6.3V
C3004	403 164 0204	CERAMIC	0.1U Z	25V
C3006	403 164 0204	CERAMIC	0.1U Z	25V
C3009	403 164 0204	CERAMIC	0.1U Z	25V
C3011	403 164 0204	CERAMIC	0.1U Z	25V
C3013	403 164 0204	CERAMIC	0.1U Z	25V
C3021	403 323 1301	CERAMIC	0.47U Z	10V
C3022	403 323 1301	CERAMIC	0.47U Z	10V
C3023	403 323 1301	CERAMIC	0.47U Z	10V
C3024	403 323 1301	CERAMIC	0.47U Z	10V
C3026	403 164 0204	CERAMIC	0.1U Z	25V
C3027	403 164 0204	CERAMIC	0.1U Z	25V
C3028	403 298 9609	CERAMIC	0.1U K	16V
C3029	403 298 9609	CERAMIC	0.1U K	16V
C3031	403 164 0204	CERAMIC	0.1U Z	25V
C3032	403 164 0204	CERAMIC	0.1U Z	25V
C3033	403 175 0606	ELECT	100U M	6.3V
C3034	403 157 3601	CERAMIC	100P J	50V
C3051	403 157 3106	CERAMIC	56P J	50V
C3052	403 157 3106	CERAMIC	56P J	50V
C3053	403 157 3106	CERAMIC	56P J	50V
C3061	403 363 3501	CERAMIC	22U M	6.3V
C3063	403 355 9900	CERAMIC	2.2U K	10V
C3064	403 379 9801	CERAMIC	10U K	6.3V
C3071	403 363 3501	CERAMIC	22U M	6.3V
C3073	403 355 9900	CERAMIC	2.2U K	10V
C3074	403 379 9801	CERAMIC	10U K	6.3V
C3081	403 164 0204	CERAMIC	0.1U Z	25V
C3082	403 164 0204	CERAMIC	0.1U Z	25V

Electrical Parts List

Key No.	Part No.	Description
C3091	403 341 3905	POS-SOLID 100U M 6.3V
C3092	403 280 0805	ELECT 330U M 6.3V
C3093	403 341 3905	POS-SOLID 100U M 6.3V
C3094	403 149 9208	CERAMIC 0.01U Z 50V
C4001	403 157 1508	CERAMIC 3P C 50V
C4002	403 157 1508	CERAMIC 3P C 50V
C4003	403 157 1508	CERAMIC 3P C 50V
C4006	403 164 0204	CERAMIC 0.1U Z 25V
C4007	403 164 0204	CERAMIC 0.1U Z 25V
C4009	403 283 6309	CERAMIC 1U Z 10V
C7001	403 283 6309	CERAMIC 1U Z 10V
C7002	403 283 6309	CERAMIC 1U Z 10V
C7003	403 164 0204	CERAMIC 0.1U Z 25V
C7005	403 164 0204	CERAMIC 0.1U Z 25V
C7007	403 283 6309	CERAMIC 1U Z 10V
C7201	403 355 9900	CERAMIC 2.2U K 10V
C7202	403 314 5905	CERAMIC 0.47U K 16V
C7204	403 070 0909	CERAMIC 0.1U K 50V
C7206	403 364 5801	CERAMIC 1U K 10V
C7207	403 355 9900	CERAMIC 2.2U K 10V
C7208	403 364 5801	CERAMIC 1U K 10V
C7209	403 157 3601	CERAMIC 100P J 50V
C7211	403 164 0204	CERAMIC 0.1U Z 25V
C7212	403 164 0204	CERAMIC 0.1U Z 25V
C7221	403 164 0204	CERAMIC 0.1U Z 25V
C7226	403 164 0204	CERAMIC 0.1U Z 25V
C7231	403 164 0204	CERAMIC 0.1U Z 25V
C7301	403 304 1801	ELECT 100U M 6.3V
	403 373 7704	ELECT 100U M 6.3V
C7302	403 164 0204	CERAMIC 0.1U Z 25V
C7303	403 164 0204	CERAMIC 0.1U Z 25V
C8123	403 164 0204	CERAMIC 0.1U Z 25V
RESISTOR		
R1001	401 260 4102	MT-GLAZE 75 JA 1/3W
R1002	401 260 4102	MT-GLAZE 75 JA 1/3W
R1003	401 260 4102	MT-GLAZE 75 JA 1/3W
R1006	401 105 0405	MT-GLAZE 100 JA 1/16W
R1007	401 105 0405	MT-GLAZE 100 JA 1/16W
R1008	401 105 0405	MT-GLAZE 100 JA 1/16W
R1011	401 105 0603	MT-GLAZE 10K JA 1/16W
R1012	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1014	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1021	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1024	401 105 0405	MT-GLAZE 100 JA 1/16W
R1031	401 113 4402	MT-GLAZE 75 JA 1/16W
R1032	401 113 4402	MT-GLAZE 75 JA 1/16W
R1033	401 113 4402	MT-GLAZE 75 JA 1/16W
R1036	401 113 4402	MT-GLAZE 75 JA 1/16W
R1037	401 113 4402	MT-GLAZE 75 JA 1/16W
R3001	401 105 0405	MT-GLAZE 100 JA 1/16W
R3002	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3003	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3004	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3021	401 105 8104	MT-GLAZE 56K JA 1/16W
R3022	401 105 0504	MT-GLAZE 1K JA 1/16W
R3023	401 105 0405	MT-GLAZE 100 JA 1/16W
R3024	401 105 0405	MT-GLAZE 100 JA 1/16W
R3026	401 105 0603	MT-GLAZE 10K JA 1/16W
R3027	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R3028	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R3029	401 105 0504	MT-GLAZE 1K JA 1/16W
R3030	401 105 0504	MT-GLAZE 1K JA 1/16W
R3031	401 105 1402	MT-GLAZE 150 JA 1/16W
R3032	401 105 1402	MT-GLAZE 150 JA 1/16W
R3033	401 105 0504	MT-GLAZE 1K JA 1/16W
R3034	401 105 1402	MT-GLAZE 150 JA 1/16W
R3036	401 105 0504	MT-GLAZE 1K JA 1/16W
R3037	401 105 0504	MT-GLAZE 1K JA 1/16W
R3038	401 105 0504	MT-GLAZE 1K JA 1/16W
R3039	401 105 1402	MT-GLAZE 150 JA 1/16W
R3041	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3042	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3043	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3046	401 105 0306	MT-GLAZE 10 JA 1/16W
R3047	401 105 0306	MT-GLAZE 10 JA 1/16W
R3048	401 105 0306	MT-GLAZE 10 JA 1/16W
R3051	401 105 0603	MT-GLAZE 10K JA 1/16W
R3052	401 105 0603	MT-GLAZE 10K JA 1/16W
R3053	401 105 0603	MT-GLAZE 10K JA 1/16W
R3054	401 105 0504	MT-GLAZE 1K JA 1/16W
R3056	401 105 0603	MT-GLAZE 10K JA 1/16W
R3061	401 105 8104	MT-GLAZE 56K JA 1/16W
R3062	401 105 0702	MT-GLAZE 100K JA 1/16W
R3063	401 105 0504	MT-GLAZE 1K JA 1/16W
R3064	401 105 8104	MT-GLAZE 56K JA 1/16W
R3071	401 105 8104	MT-GLAZE 56K JA 1/16W
R3072	401 105 0702	MT-GLAZE 100K JA 1/16W
R3073	401 105 0504	MT-GLAZE 1K JA 1/16W
R3074	401 105 8104	MT-GLAZE 56K JA 1/16W
R3081	401 105 0504	MT-GLAZE 1K JA 1/16W
R3082	401 105 0504	MT-GLAZE 1K JA 1/16W
R3083	401 105 0405	MT-GLAZE 100 JA 1/16W
R4001	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R4003	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R4006	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R4009	401 105 0603	MT-GLAZE 10K JA 1/16W
R4011	401 105 0306	MT-GLAZE 10 JA 1/16W
R4013	401 262 8504	MT-GLAZE 62 FA 1/16W
R4016	401 105 0306	MT-GLAZE 10 JA 1/16W
R4018	401 262 8504	MT-GLAZE 62 FA 1/16W
R4021	401 105 0306	MT-GLAZE 10 JA 1/16W
R4023	401 262 8504	MT-GLAZE 62 FA 1/16W
R4031	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R4032	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7001	401 105 0603	MT-GLAZE 10K JA 1/16W
R7002	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7003	401 105 0603	MT-GLAZE 10K JA 1/16W
R7004	401 105 0603	MT-GLAZE 10K JA 1/16W
R7006	401 105 0405	MT-GLAZE 100 JA 1/16W
R7091	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7092	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7093	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7094	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7096	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7200	401 036 1205	MT-GLAZE 22 JA 1/8W
R7202	401 105 0405	MT-GLAZE 100 JA 1/16W
R7203	401 105 8005	MT-GLAZE 1M JA 1/16W
R7204	401 177 2000	MT-GLAZE 3.9M JA 1/16W
R7221	401 105 0405	MT-GLAZE 100 JA 1/16W
R7222	401 105 1303	MT-GLAZE 15 JA 1/16W
R7223	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7226	401 105 0405	MT-GLAZE 100 JA 1/16W
R7227	401 105 1303	MT-GLAZE 15 JA 1/16W
R7228	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7231	401 105 0603	MT-GLAZE 10K JA 1/16W
R7232	401 105 0603	MT-GLAZE 10K JA 1/16W
R7233	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7301	401 105 0603	MT-GLAZE 10K JA 1/16W
R7302	401 105 0603	MT-GLAZE 10K JA 1/16W
R7303	401 105 0603	MT-GLAZE 10K JA 1/16W
R7306	401 105 0405	MT-GLAZE 100 JA 1/16W
R7307	401 105 0405	MT-GLAZE 100 JA 1/16W
R7308	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R7309	401 105 7909	MT-GLAZE 0.000 ZA 1/16W

Key No.	Part No.	Description
R7312	401 105 0603	MT-GLAZE 10K JA 1/16W
R7314	401 105 0603	MT-GLAZE 10K JA 1/16W
R8115	401 105 0405	MT-GLAZE 100 JA 1/16W
R8116	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8117	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8119	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8122	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8124	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R8131	401 260 4102	MT-GLAZE 75 JA 1/3W
R8132	401 260 4102	MT-GLAZE 75 JA 1/3W
R8133	401 260 4102	MT-GLAZE 75 JA 1/3W
R8136	401 105 0405	MT-GLAZE 100 JA 1/16W
R8137	401 105 0405	MT-GLAZE 100 JA 1/16W
R8138	401 105 0405	MT-GLAZE 100 JA 1/16W
R8142	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8144	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8181	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8182	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8191	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8192	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8193	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8194	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8196	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8197	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8198	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R8199	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
COIL		
L1001	645 044 8850	FILTER,EMI 400MHZ
L1002	645 044 8850	FILTER,EMI 400MHZ
L1003	645 044 8850	FILTER,EMI 400MHZ
L1006	645 044 8843	FILTER,EMI 200MHZ
L1007	645 044 8843	FILTER,EMI 200MHZ
L1031	645 044 8850	FILTER,EMI 400MHZ
L1032	645 044 8850	FILTER,EMI 400MHZ
L1033	645 044 8850	FILTER,EMI 400MHZ
L1036	645 044 8843	FILTER,EMI 200MHZ
L1037	645 044 8843	FILTER,EMI 200MHZ
L3031	645 001 4512	INDUCTOR,10U K
L8131	645 044 8850	FILTER,EMI 400MHZ
L8132	645 044 8850	FILTER,EMI 400MHZ
L8133	645 044 8850	FILTER,EMI 400MHZ
L8141	645 044 8843	FILTER,EMI 200MHZ
L8142	645 044 8843	FILTER,EMI 200MHZ
DIODE		
D1001	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1002	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1003	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1004	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1006	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1007	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1008	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1009	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1011	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1012	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1031	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1032	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1033	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1036	407 187 8209	ZENER DIODE UDZ12B-TE-17
D1037	407 187 8209	ZENER DIODE UDZ12B-TE-17
D3061	407 149 0807	DIODE 1SS355-TE-17
D3062	407 149 0807	DIODE 1SS355-TE-17
D3063	407 149 0807	DIODE 1SS355-TE-17
D3064	407 149 0807	DIODE 1SS355-TE-17
D3071	407 149 0807	DIODE 1SS355-TE-17
D3072	407 149 0807	DIODE 1SS355-TE-17
D3073	407 149 0807	DIODE 1SS355-TE-17
D3074	407 149 0807	DIODE 1SS355-TE-17
D7221	407 223 0907	ZENER DIODE 02DZ4.7Y(TPH3
D7226	407 223 0907	ZENER DIODE 02DZ4.7Y(TPH3
D7301	407 201 2701	DIODE RB051L-40-TE25
D7302	407 149 0807	DIODE 1SS355-TE-17
D7303	407 149 0807	DIODE 1SS355-TE-17
D8131	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D8132	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D8133	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D8134	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D8136	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D8137	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D8141	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D8142	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
MISCELLANEOUS		
K10A	645 054 3449	SOCKET,D-SUB 15P
K10B	645 054 0226	SOCKET,DVI 29P
K10C	645 054 3449	SOCKET,D-SUB 15P
SC8101	645 045 7449	SURGE-ABSORBER
SC8102	645 045 7449	SURGE-ABSORBER
SC8103	645 045 7449	SURGE-ABSORBER
SC8104	645 045 7449	SURGE-ABSORBER
SC8106	645 045 7449	SURGE-ABSORBER
SC8107	645 045 7449	SURGE-ABSORBER
SC8108	645 045 7449	SURGE-ABSORBER
SC8109	645 045 7449	SURGE-ABSORBER
SC8111	645 045 7449	SURGE-ABSORBER
SC8112	645 045 7449	SURGE-ABSORBER
SW7001	645 054 8574	SWITCH,PUSH 1P-1TX1

A/V BOARD

610 300 6444 ASSY,PWB,A/V MC3A

TRANSISTOR		
Q2031	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q2041	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q2051	405 134 5905	TR 2SA1037AK-T146-R
	405 147 2205	TR 2SA1037AK-S-T146
	405 002 0308	TR 2SA1037K T146 R
	405 002 0407	TR 2SA1037K T146 S
	405 002 6706	TR 2SA1179-M6-TB
	405 002 6904	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E

Key No.	Part No.	Description
	405 173 9704	TR 2SA1235A1F
Q2061	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2071	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2081	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3866	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5001	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5002	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5051	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5052	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5061	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q5062	405 014 4509	TR 2SC2412K T146 R
	405 014 4608	TR 2SC2412K T146 S
	405 015 8704	TR 2SC2812-L6-TB
	405 015 8902	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB0
	405 163 1701	TR 2SC2812N-L7-TB0
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
INTEGRATED CIRCUIT		
IC2091	409 395 5902	IC TC7SH00FU-(TE85L)
IC3801	409 395 5902	IC TC7SH00FU-(TE85L)
IC3806	409 380 6303	IC HIN232CB
IC3851	410 457 0100	IC TWM7000-210010
IC3852	410 466 3109	IC TWM7000-170010
	410 457 7109	IC UPD78F9801GB-8ES-MC3A
IC5001	409 051 2702	IC TC4052BF(EL)
CAPACITOR		
C1041	403 164 0204	CERAMIC 0.1U Z 25V
C1051	403 157 3601	CERAMIC 100P J 50V
C1052	403 157 3601	CERAMIC 100P J 50V
C1053	403 157 3601	CERAMIC 100P J 50V
C1054	403 157 3601	CERAMIC 100P J 50V
C1061	403 157 3601	CERAMIC 100P J 50V
C1062	403 157 3601	CERAMIC 100P J 50V
C1063	403 157 3601	CERAMIC 100P J 50V
C1064	403 157 3601	CERAMIC 100P J 50V
C1071	403 283 6309	CERAMIC 1U Z 10V
C1072	403 304 3300	ELECT 47U M 16V
C1073	403 157 4202	CERAMIC 220P J 50V
C2013	403 149 9208	CERAMIC 0.01U Z 50V
C2031	403 321 2607	ELECT 10U M 16V
C2032	403 164 0204	CERAMIC 0.1U Z 25V
C2033	403 304 3300	ELECT 47U M 16V
C2041	403 321 2607	ELECT 10U M 16V
C2042	403 164 0204	CERAMIC 0.1U Z 25V
C2051	403 321 2607	ELECT 10U M 16V
C2052	403 164 0204	CERAMIC 0.1U Z 25V
C2061	403 321 2607	ELECT 10U M 16V
C2062	403 164 0204	CERAMIC 0.1U Z 25V
C2071	403 164 0204	CERAMIC 0.1U Z 25V
C2072	403 164 0204	CERAMIC 0.1U Z 25V
C2081	403 321 2607	ELECT 10U M 16V
C2082	403 164 0204	CERAMIC 0.1U Z 25V
C2091	403 164 0204	CERAMIC 0.1U Z 25V
C2096	403 229 3508	ELECT 100U M 16V
C2097	403 322 7809	ELECT 220U M 6.3V
C3801	403 283 6309	CERAMIC 1U Z 10V
C3802	403 162 6208	ELECT 1U M 50V
C3808	403 162 6208	ELECT 1U M 50V
C3809	403 162 6208	ELECT 1U M 50V
C3811	403 162 6208	ELECT 1U M 50V
C3812	403 162 6208	ELECT 1U M 50V
C3813	403 283 6309	CERAMIC 1U Z 10V
C3851	403 164 0204	CERAMIC 0.1U Z 25V
C3852	403 164 0204	CERAMIC 0.1U Z 25V
C3853	403 304 3102	ELECT 22U M 16V
C3854	403 164 0204	CERAMIC 0.1U Z 25V
C5001	403 323 8805	CERAMIC 2.2U Z 16V
C5002	403 323 8805	CERAMIC 2.2U Z 16V
C5003	403 323 8805	CERAMIC 2.2U Z 16V

Electrical Parts List

Key No.	Part No.	Description
C5004	403 321 2607	ELECT 10U M 16V
C5006	403 323 8805	CERAMIC 2.2U Z 16V
C5007	403 323 8805	CERAMIC 2.2U Z 16V
C5008	403 323 8805	CERAMIC 2.2U Z 16V
C5009	403 323 1301	CERAMIC 0.47U Z 10V
C5011	403 164 0204	CERAMIC 0.1U Z 25V
C5012	403 164 0204	CERAMIC 0.1U Z 25V
C5013	403 304 3102	ELECT 22U M 16V
C5051	403 162 4709	ELECT 10U M 16V
C5052	403 164 0204	CERAMIC 0.1U Z 25V
C5061	403 162 4709	ELECT 10U M 16V
C5062	403 164 0204	CERAMIC 0.1U Z 25V
RESISTOR		
RB5001	645 021 0365	R-NETWORK 100KX4 0.063W
	645 025 5397	R-NETWORK 100KX4 1/16W
RB5002	645 021 0365	R-NETWORK 100KX4 0.063W
	645 025 5397	R-NETWORK 100KX4 1/16W
RC1001	645 034 8501	UNIT,REMOCON RECEIVER
R1041	401 105 0405	MT-GLAZE 100 JA 1/16W
R1042	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1051	401 105 5509	MT-GLAZE 470K JA 1/16W
R1052	401 105 5509	MT-GLAZE 470K JA 1/16W
R1053	401 105 5509	MT-GLAZE 470K JA 1/16W
R1054	401 105 5509	MT-GLAZE 470K JA 1/16W
R1056	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1057	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1058	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1059	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1060	401 276 4707	MT-GLAZE 0.000 ZA 1/3W
R1061	401 105 0702	MT-GLAZE 100K JA 1/16W
R1062	401 105 0405	MT-GLAZE 100 JA 1/16W
R1063	401 105 0702	MT-GLAZE 100K JA 1/16W
R1064	401 105 0405	MT-GLAZE 100 JA 1/16W
R1065	401 276 4707	MT-GLAZE 0.000 ZA 1/3W
R1067	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1068	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1071	401 105 0405	MT-GLAZE 100 JA 1/16W
R1072	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1073	401 105 0405	MT-GLAZE 100 JA 1/16W
R1091	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R1092	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2001	401 260 4102	MT-GLAZE 75 JA 1/3W
R2002	401 260 4102	MT-GLAZE 75 JA 1/3W
R2003	401 260 4102	MT-GLAZE 75 JA 1/3W
R2006	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2007	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2008	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2011	401 260 4102	MT-GLAZE 75 JA 1/3W
R2012	401 260 4102	MT-GLAZE 75 JA 1/3W
R2013	401 105 0405	MT-GLAZE 100 JA 1/16W
R2014	401 105 0603	MT-GLAZE 10K JA 1/16W
R2017	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2018	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2019	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2021	401 260 4102	MT-GLAZE 75 JA 1/3W
R2022	401 105 5509	MT-GLAZE 470K JA 1/16W
R2023	401 105 5509	MT-GLAZE 470K JA 1/16W
R2024	401 105 0405	MT-GLAZE 100 JA 1/16W
R2026	401 105 0405	MT-GLAZE 100 JA 1/16W
R2027	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2031	401 105 5400	MT-GLAZE 47K JA 1/16W
R2032	401 105 2904	MT-GLAZE 22K JA 1/16W
R2033	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2034	401 105 0504	MT-GLAZE 1K JA 1/16W
R2036	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2041	401 105 5400	MT-GLAZE 47K JA 1/16W
R2042	401 105 2904	MT-GLAZE 22K JA 1/16W
R2043	401 105 0504	MT-GLAZE 1K JA 1/16W
R2044	401 105 0504	MT-GLAZE 1K JA 1/16W
R2046	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2047	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R2051	401 105 5400	MT-GLAZE 47K JA 1/16W
R2052	401 105 2904	MT-GLAZE 22K JA 1/16W
R2053	401 105 0504	MT-GLAZE 1K JA 1/16W
R2054	401 105 0504	MT-GLAZE 1K JA 1/16W
R2056	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2057	401 105 4601	MT-GLAZE 3.9K JA 1/16W
R2061	401 105 5400	MT-GLAZE 47K JA 1/16W
R2062	401 105 5400	MT-GLAZE 47K JA 1/16W
R2063	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2064	401 105 0504	MT-GLAZE 1K JA 1/16W
R2066	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2071	401 105 5400	MT-GLAZE 47K JA 1/16W
R2072	401 105 5400	MT-GLAZE 47K JA 1/16W
R2073	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2074	401 105 0504	MT-GLAZE 1K JA 1/16W
R2076	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2081	401 105 5400	MT-GLAZE 47K JA 1/16W
R2082	401 105 5400	MT-GLAZE 47K JA 1/16W
R2083	401 105 0504	MT-GLAZE 1K JA 1/16W
R2084	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2086	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R2091	401 105 0405	MT-GLAZE 100 JA 1/16W
R2092	401 105 0405	MT-GLAZE 100 JA 1/16W
R2093	401 105 0603	MT-GLAZE 10K JA 1/16W
R2094	401 105 0603	MT-GLAZE 10K JA 1/16W
R2099	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3801	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3802	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3803	401 105 0603	MT-GLAZE 10K JA 1/16W
R3804	401 105 0504	MT-GLAZE 1K JA 1/16W
R3821	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3822	401 105 0405	MT-GLAZE 100 JA 1/16W
R3823	401 105 0405	MT-GLAZE 100 JA 1/16W
R3824	401 105 0405	MT-GLAZE 100 JA 1/16W
R3848	401 105 0405	MT-GLAZE 100 JA 1/16W
R3849	401 105 0603	MT-GLAZE 10K JA 1/16W
R3851	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3852	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3853	401 105 2904	MT-GLAZE 22K JA 1/16W
R3854	401 105 2904	MT-GLAZE 22K JA 1/16W
R3855	401 105 2904	MT-GLAZE 22K JA 1/16W
R3856	401 105 0603	MT-GLAZE 10K JA 1/16W
R3857	401 105 0603	MT-GLAZE 10K JA 1/16W
R3858	401 105 0603	MT-GLAZE 10K JA 1/16W
R3859	401 105 0603	MT-GLAZE 10K JA 1/16W
R3861	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3862	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3863	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3864	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3866	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R3867	401 105 5400	MT-GLAZE 47K JA 1/16W
R3868	401 105 0603	MT-GLAZE 10K JA 1/16W
R3871	401 105 2904	MT-GLAZE 22K JA 1/16W
R3872	401 105 2904	MT-GLAZE 22K JA 1/16W
R3873	401 105 2904	MT-GLAZE 22K JA 1/16W
R3874	401 105 2904	MT-GLAZE 22K JA 1/16W
R3876	401 105 0405	MT-GLAZE 100 JA 1/16W
R3877	401 105 0405	MT-GLAZE 100 JA 1/16W
R3878	401 105 0405	MT-GLAZE 100 JA 1/16W
R3879	401 105 0405	MT-GLAZE 100 JA 1/16W
R3882	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R3886	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3887	401 105 0603	MT-GLAZE 10K JA 1/16W

Key No.	Part No.	Description
R3888	401 105 0603	MT-GLAZE 10K JA 1/16W
R3889	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3891	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3892	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5001	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R5002	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R5003	401 105 0405	MT-GLAZE 100 JA 1/16W
R5004	401 105 0405	MT-GLAZE 100 JA 1/16W
R5006	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5007	401 105 0603	MT-GLAZE 10K JA 1/16W
R5008	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5009	401 105 0603	MT-GLAZE 10K JA 1/16W
R5051	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5052	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R5053	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R5054	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5061	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5062	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R5063	401 105 2805	MT-GLAZE 2.2K JA 1/16W
R5064	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R5066	401 105 5202	MT-GLAZE 470 JA 1/16W
COIL		
L1051	645 045 6183	FILTER,EMI 25MHZ
L1052	645 045 6183	FILTER,EMI 25MHZ
L1053	645 045 6183	FILTER,EMI 25MHZ
L1054	645 045 6183	FILTER,EMI 25MHZ
L1061	645 045 6183	FILTER,EMI 25MHZ
L1064	645 045 6183	FILTER,EMI 25MHZ
L1081	645 045 6183	FILTER,EMI 25MHZ
L1082	645 045 6183	FILTER,EMI 25MHZ
L1083	645 045 6183	FILTER,EMI 25MHZ
L1084	645 045 6183	FILTER,EMI 25MHZ
L1086	645 045 6183	FILTER,EMI 25MHZ
L1087	645 045 6183	FILTER,EMI 25MHZ
L1088	645 045 6183	FILTER,EMI 25MHZ
L2006	645 044 8836	FILTER,EMI 100MHZ
L2007	645 044 8836	FILTER,EMI 100MHZ
L2008	645 044 8836	FILTER,EMI 100MHZ
L2013	645 044 8836	FILTER,EMI 100MHZ
L2014	645 044 8836	FILTER,EMI 100MHZ
L2016	645 044 8836	FILTER,EMI 100MHZ
L2022	645 044 8836	FILTER,EMI 100MHZ
L2023	645 045 6183	FILTER,EMI 25MHZ
L2024	645 045 6183	FILTER,EMI 25MHZ
L2031	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
L5011	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
DIODE		
D1051	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1052	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1053	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1054	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1056	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1057	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1058	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1059	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D1061	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1062	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1068	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1069	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1081	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1082	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1083	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1084	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1085	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1086	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1087	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1088	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1089	407 223 0709	ZENER DIODE 02DZ20Y(TPH3)
D1091	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1092	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1093	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D1094	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D2001	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2002	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2003	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2004	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2006	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2007	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2011	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2012	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2013	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2014	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2016	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D2021	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2022	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2023	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2024	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2026	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D2027	407 223 1102	ZENER DIODE 02DZ6.2Y(TPH3
D3823	407 149 0807	DIODE 1SS355-TE-17
D3824	407 149 0807	DIODE 1SS355-TE-17
D3881	407 149 0807	DIODE 1SS355-TE-17
D5001	407 223 0600	ZENER DIODE 02DZ15Y(TPH3)
D5002	407 223 0600	ZENER DIODE 02DZ15Y(TPH3)
D5003	407 223 0600	ZENER DIODE 02DZ15Y(TPH3)
D5004	407 223 0600	ZENER DIODE 02DZ15Y(TPH3)
D5006	407 223 0600	ZENER DIODE 02DZ15Y(TPH3)
D5007	407 223 0600	ZENER DIODE 02DZ15Y(TPH3)
D5008	407 223 0600	ZENER DIODE 02DZ15Y(TPH3)
D5051	407 149 0807	DIODE 1SS355-TE-17
D5061	407 149 0807	DIODE 1SS355-TE-17
MISCELLANEOUS		
K10D	645 000 2571	JACK,PHONE D8.0
K10E	645 000 2571	JACK,PHONE D8.0
K10F	645 048 6739	SOCKET,DIN 8P
K10G	645 028 0382	SOCKET,USB 4P
K10H	645 017 1680	JACK,PHONE D3.6
K20A	645 039 2269	JACK,RCA-3
K20B	610 010 8295	SOCKET,DIN 4P
K20C	645 038 4462	JACK,RCA-3
SW1001	645 054 8574	SWITCH,PUSH 1P-1TX1
X3851	645 053 3877	OSC,CERAMIC 5.00MHZ
X3852	645 053 9114	OSC,CERAMIC 6.000MHZ

R/C FRONT BOARD

610 300 6451 ASSY,PWB,R/C FRONT MC3A

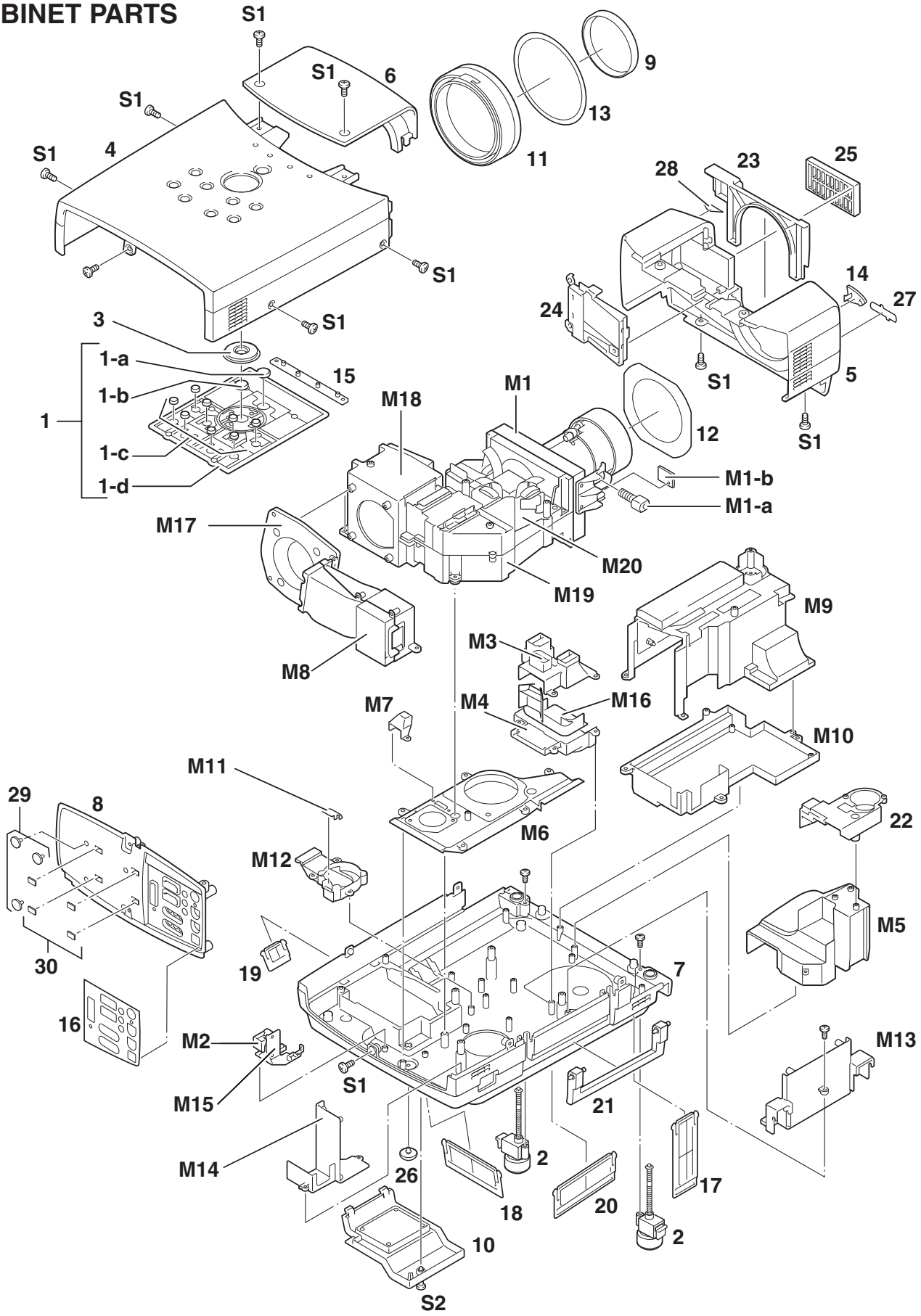
CAPACITOR		
C2801	403 283 6309	CERAMIC 1U Z 10V
C2802	403 157 6206	CERAMIC 220P K 50V
C2803	403 304 2402	ELECT 100U M 10V
RESISTOR		
RC2801	645 034 8501	UNIT,REMOCON RECEIVER
R2801	401 105 0405	MT-GLAZE 100 JA 1/16W
R2802	401 105 0405	MT-GLAZE 100 JA 1/16W
R2803	401 105 7909	MT-GLAZE 0.000 ZA 1/16W

Key No.	Part No.	Description
CONROL BOARD		
610 302 5902 ASSY,PWB,CONTROL MC3A		
CAPACITOR		
C6801	403 164 0204	CERAMIC 0.1U Z 25V
C6802	403 164 0204	CERAMIC 0.1U Z 25V
C6803	403 164 0204	CERAMIC 0.1U Z 25V
C6804	403 164 0204	CERAMIC 0.1U Z 25V
RESISTOR		
R6801	401 105 2904	MT-GLAZE 22K JA 1/16W
R6802	401 105 1600	MT-GLAZE 15K JA 1/16W
R6803	401 105 1600	MT-GLAZE 15K JA 1/16W
R6804	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R6806	401 105 5202	MT-GLAZE 470 JA 1/16W
R6807	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R6808	401 105 5202	MT-GLAZE 470 JA 1/16W
R6809	401 105 2904	MT-GLAZE 22K JA 1/16W
R6811	401 105 1600	MT-GLAZE 15K JA 1/16W
R6812	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R6813	401 105 5301	MT-GLAZE 4.7K JA 1/16W
R6814	401 105 3307	MT-GLAZE 2.7K JA 1/16W
R6816	401 105 4106	MT-GLAZE 3.3K JA 1/16W
R6817	401 105 5202	MT-GLAZE 470 JA 1/16W
R6851	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6852	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6853	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6854	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R6857	401 105 8203	MT-GLAZE 68K JA 1/16W
R6858	401 105 0603	MT-GLAZE 10K JA 1/16W
DIODE		
D6801	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D6802	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D6803	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D6804	407 223 0501	ZENER DIODE 02DZ12Y(TPH3)
D6856	407 209 7401	LED SML-210YT-K-T86
	407 209 7500	LED SML-210YT T86 L
D6857	407 203 7803	LED SML-210LT T86 M
D6858	407 203 7902	LED SML-210MT T86 M
D6859	407 203 7803	LED SML-210LT T86 M
MISCELLANEOUS		
SW6801	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6802	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6803	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6804	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6806	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6807	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6808	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6809	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6811	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6812	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6813	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6814	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6816	645 026 2791	SWITCH,PUSH 1P-1TX1
SW6817	645 026 2791	SWITCH,PUSH 1P-1TX1
ACCESSORIES		
	645 054 3135	CABLE,MOUSE SRAL
	645 054 3142	CABLE,MOUSE SRAL
	645 039 7219	CABLE,MOUSE SRAL
	645 063 6943	CABLE,USB
	645 061 5115	CABLE,USB
	645 063 6936	CABLE,USB
	610 302 3106	COVER,DUST-MC3A
	645 043 9704	ADAPTOR,DVI/VGA
	645 057 2999	CABLE,INTERFACE VGA
RC		
	645 055 8597	ASSY,REMOCON CXLZ
A9901C	610 302 4196	RC-BATTERY LID-CXLZ
OWNER'S MANUAL		
(English)	610 308 2318	OWNER'S MANUAL-MH7A
(Germany)	610 308 2325	OWNER'S MANUAL-MH7A-D
(French)	610 308 2332	OWNER'S MANUAL-MH7A-F
(Italy)	610 308 2349	OWNER'S MANUAL-MH7A-I
(Spanish)	610 308 2356	OWNER'S MANUAL-MH7A-E
AC CORD		
⚠ (US)	645 054 1162	CORD,POWER-3.0MK
⚠ (EU)	645 054 1155	CORD,POWER-3.0MK
⚠ (UK)	645 054 1148	CORD,POWER-3.138MK

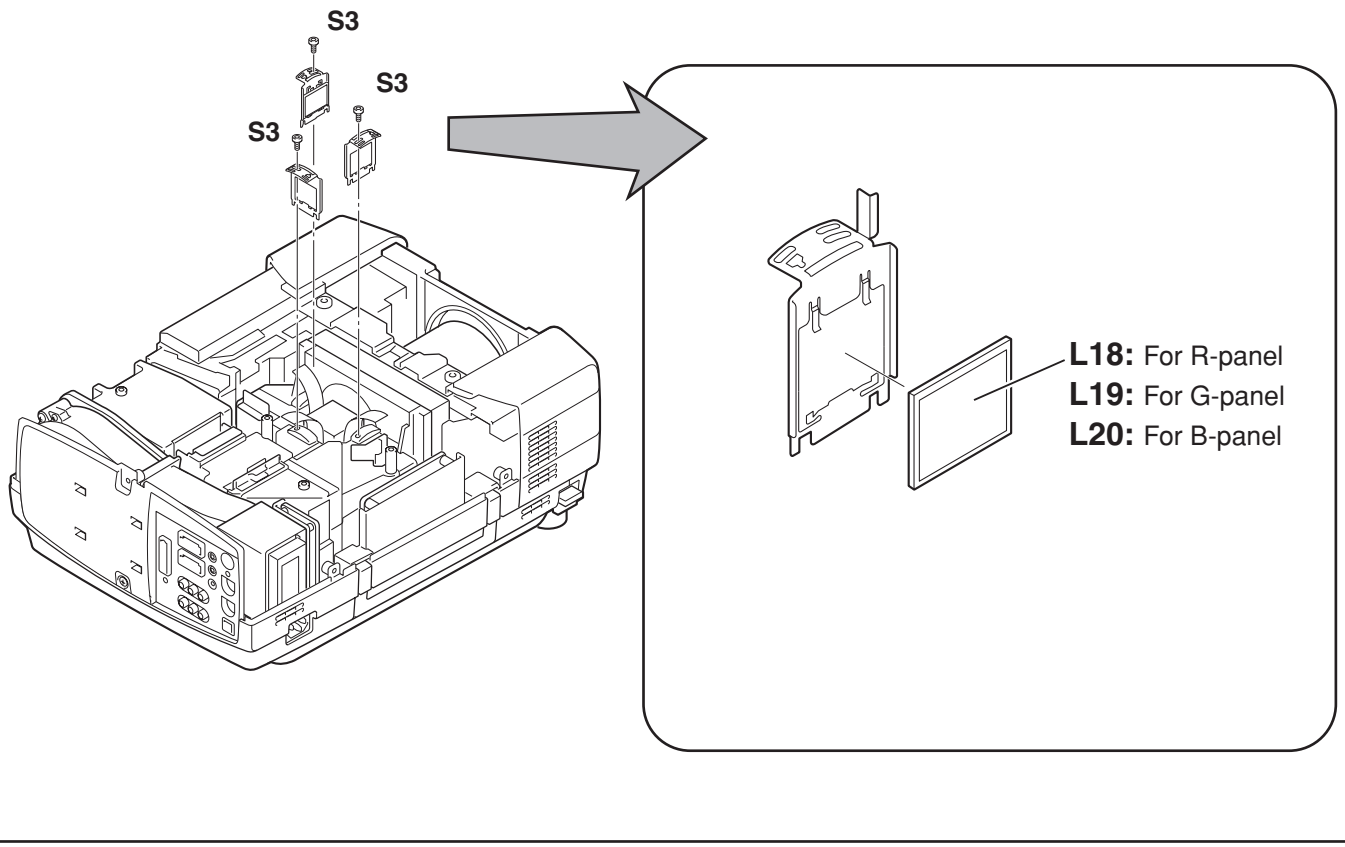
■ Mechanical Parts List

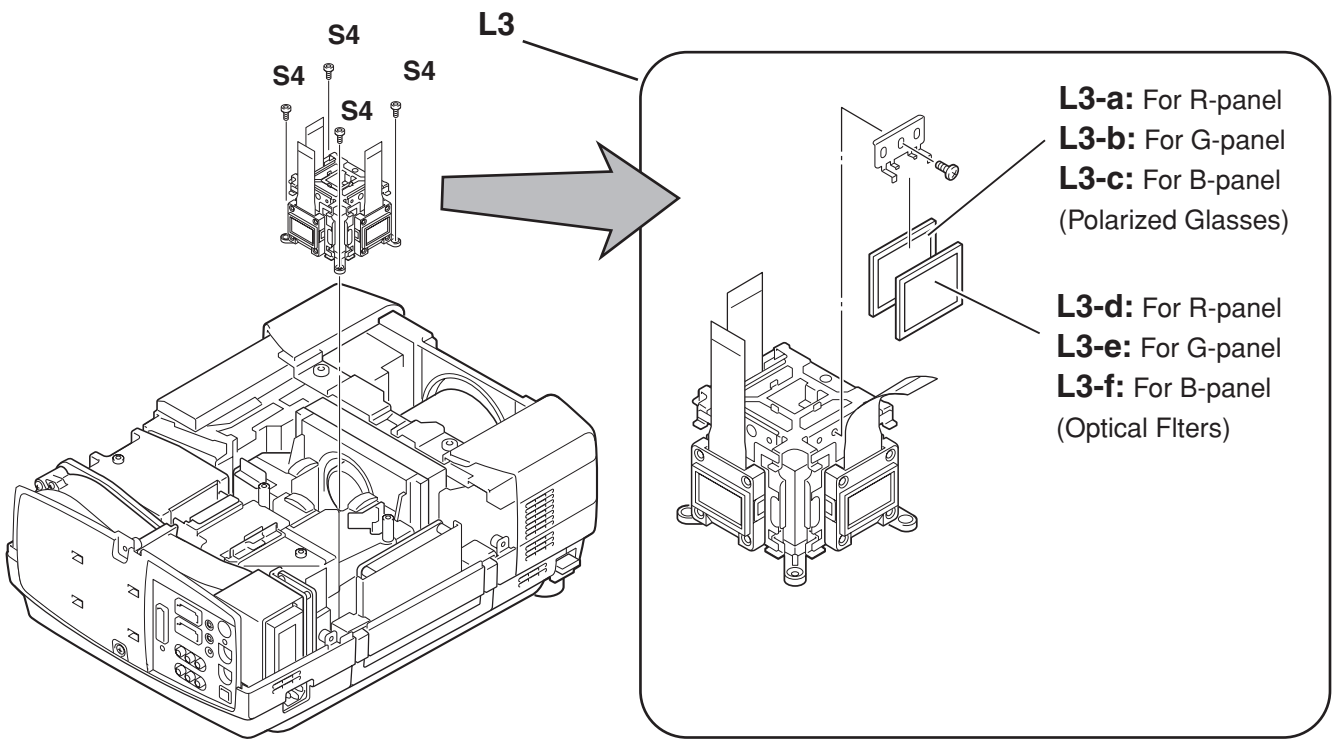
Note: Parts order must contain Chassis No., Part No., and Descriptions.

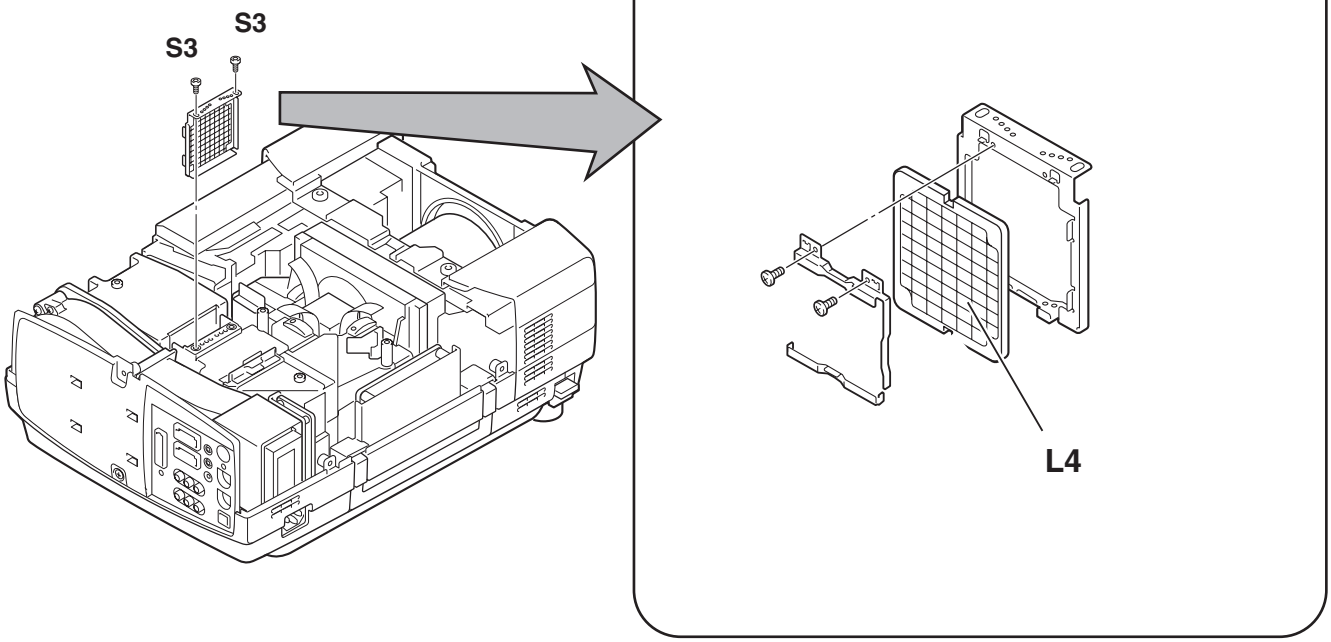
● CABINET PARTS



● OPTICAL PARTS



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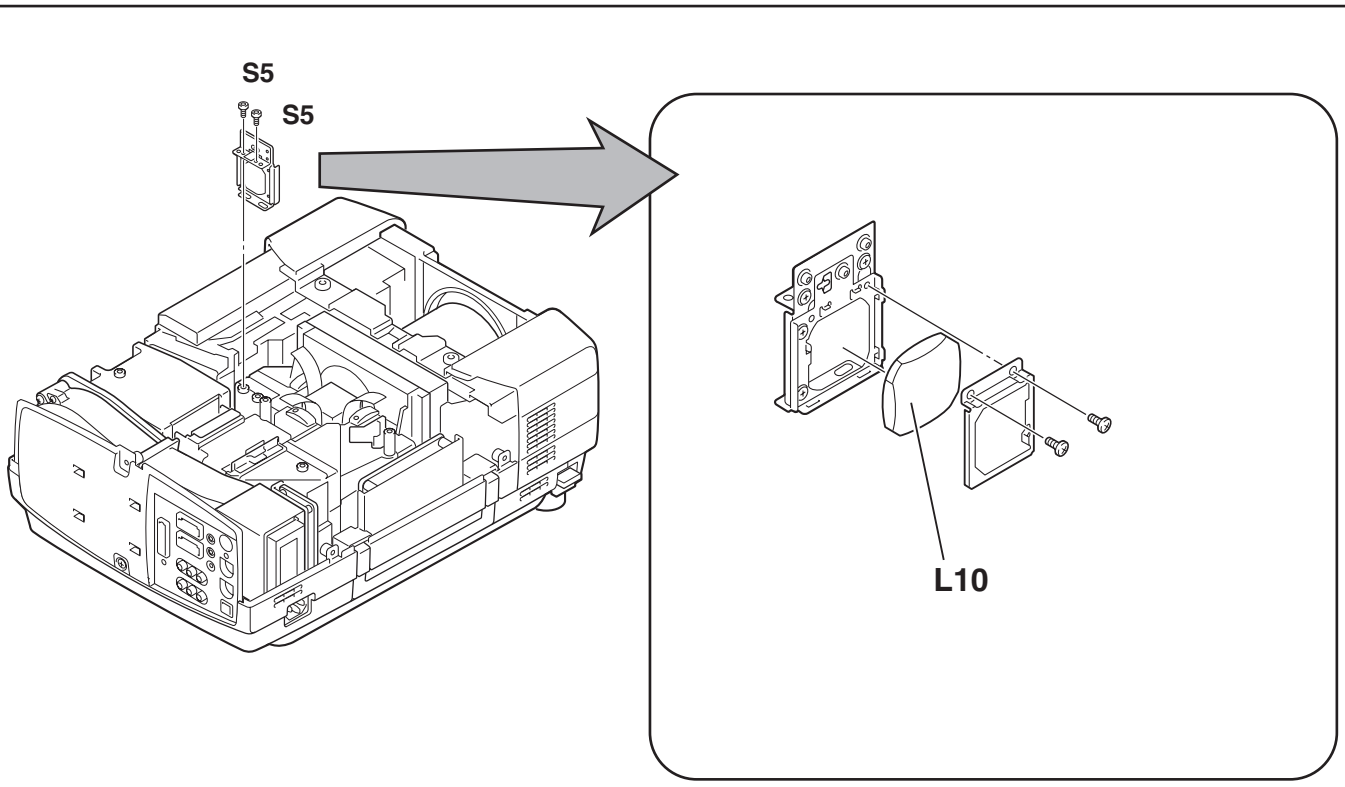
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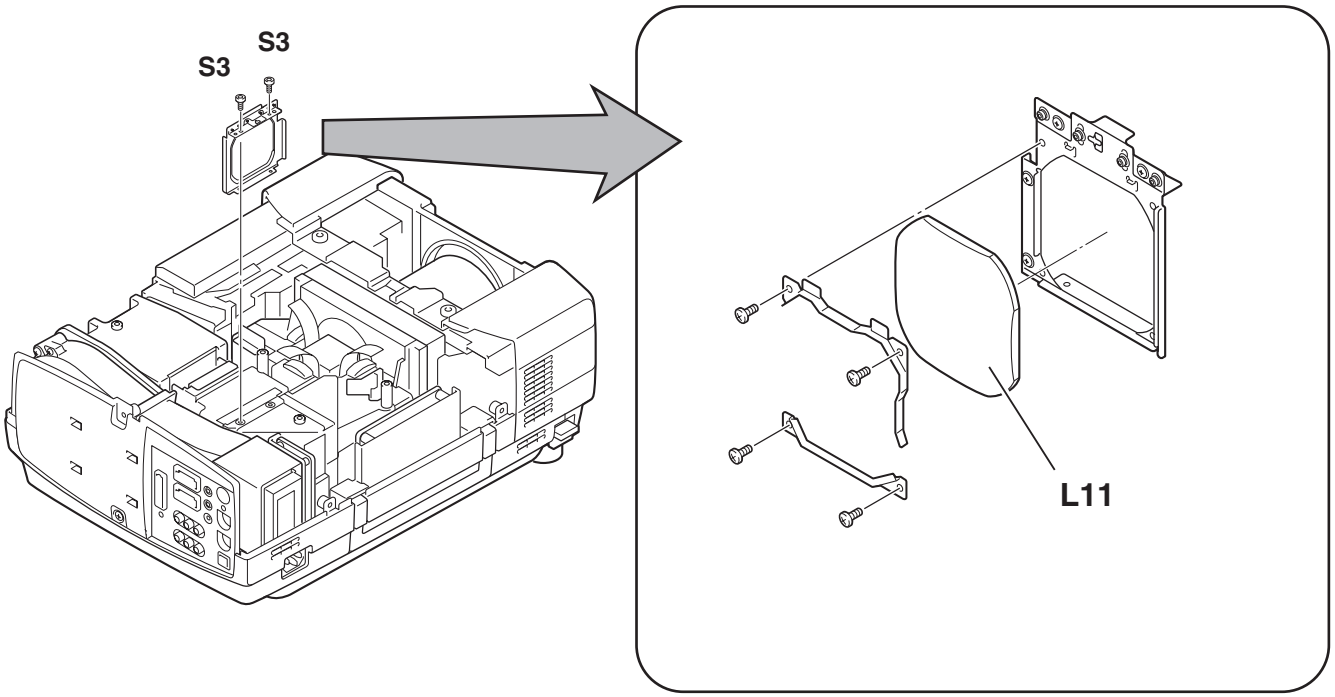
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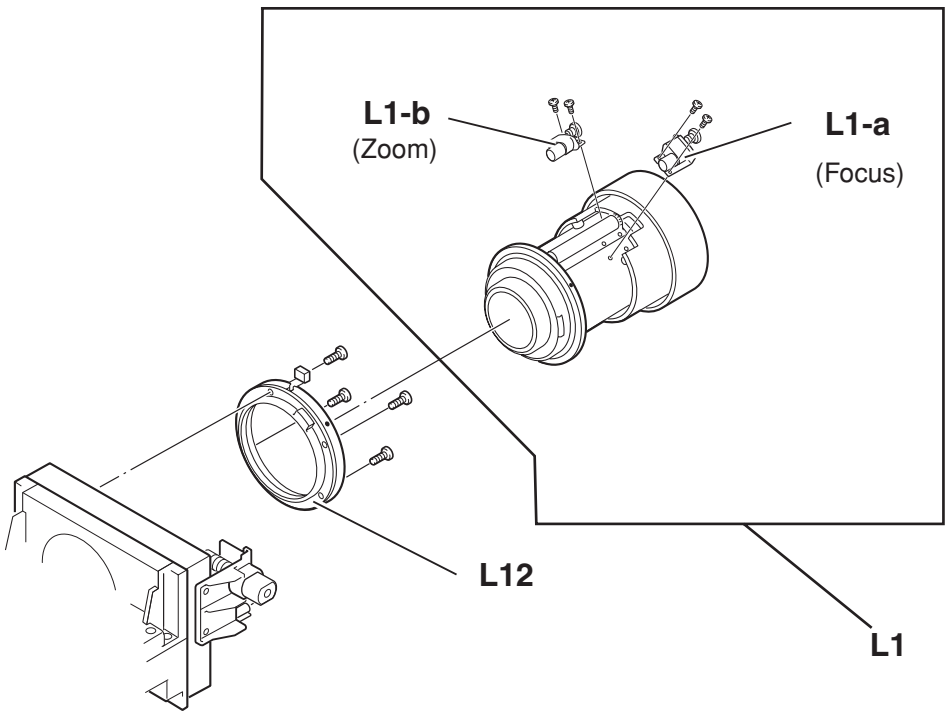
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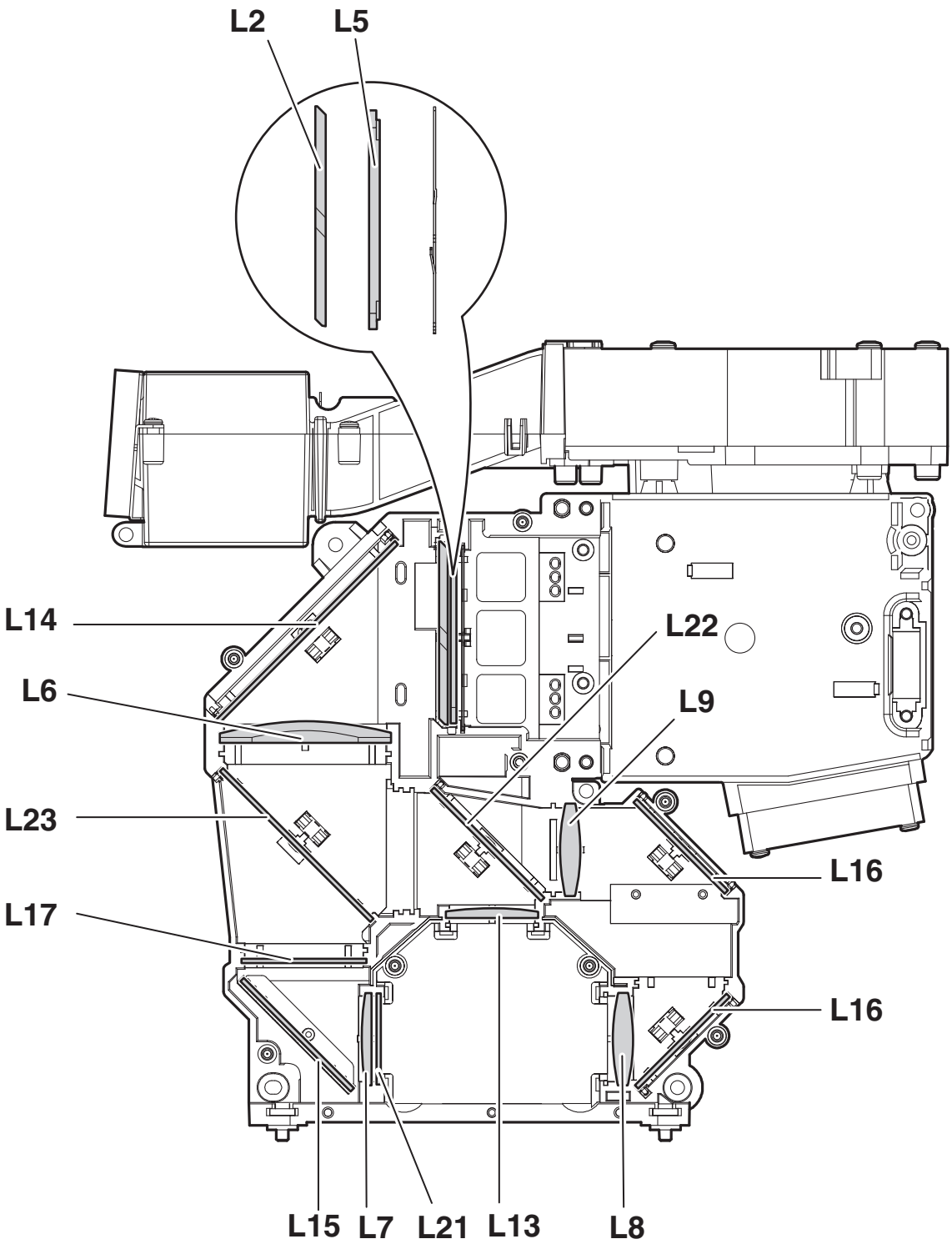
L1-a
(Focus)
L12
L1



CAUTION:
Part must be placed in specified direction when replacing the optical parts. Please see "Optical Parts Disassemblies" for further instructions.

Mechanical Parts List

Key No.	Part No.	Description
CABINET PARTS		
1	610 303 3433	ASSY,BUTTON-MC3A
	(Including Key No. 1-a to 1-d)	
1-a	610 302 5292	CAP BUTTON POWER-MC3A
1-b	610 302 5308	CAP BUTTON SELECT-MC3A
1-c	610 301 7204	CAP BUTTON CONTROL-MC3A
1-d	610 301 7181	BUTTON CONTROL-MC3A
2	610 301 4937	ASSY,STAND LEG-MC3A
3	610 301 7198	BUTTON ZOOM-MC3A
4	610 301 4944	CABINET TOP-MC3A
5	610 301 4951	CABINET FRONT-MC3A
6	610 301 4968	CABINET FRONT A-MC3A
7	610 309 0290	CABINET BOTTOM SERVICE-MH
8	610 305 9181	CABINET BACK-MC3AB
9	610 301 4999	CAP LNS-MC3A
10	610 301 5026	COVER LAMP MC3A
11	610 301 5033	COVER LENZ MC3A
12	610 301 5040	COVER LENZ SHEET-MC3A
13	610 301 5057	DEC LENZ RING-MC3A
14	610 301 5064	DEC INLAY RC F-MC3A
15	610 302 4134	DEC LED-MC3A
16	610 301 7273	DEC AV SHEET-MC3A
17	610 307 6331	FILTER BASE A-MH7A
18	610 301 5095	FILTER BASE B-MC3A
19	610 308 2820	FILTER BASE LAMP-MH7A
20	610 307 6348	FILTER BASE C-MH7A
21	610 301 5101	HANDLE-MC3A
22	610 307 6393	MOUNTING SP-MH7A
23	610 301 5194	MOUNTING COVER LENZ-MC3A
24	610 302 7401	MOUNTING DUCT FRONT-MC3A
25	610 301 5514	PANEL FRONT FIN-MC3A
26	610 293 9972	SPACER LEG-MA8A
27	645 047 8031	BADGE,SANYO*26.2X5.7L26.0
28	610 289 1812	BADGE V MARK S-MK6A
29	610 297 7936	SPACER COVER SCREW NWMG-M
30	610 295 9635	DEC BACK-MS6A
CHASSIS PARTS		
M1	610 301 4920	COMPL,HOLDER LENS-MC3A
	(Including Key No. M1-a and M1-b)	
M1-a	645 056 7292	ASSY,MOTOR(MC3A)
M1-b	645 059 1327	UNIT,MOUNTING LNS BASE MC
M2	610 301 7174	ARM INTERLOCK-MC3A
M3	610 307 6232	COVER DUCT FAN TOP-MH7A
M4	610 308 2745	COVER DUCT FAN BTM-MH7A
M5	610 307 6249	COVER DUCT IN A-MH7A
M6	610 307 6256	COVER DUCT IN B-MH7A
M7	610 301 5378	COVER DUCT PBS-MC3A
M8	610 308 6910	COVER DUCT EXT SERVICE-MH
M9	610 301 7211	COVER POWER PWB TOP-MC3A
M10	610 301 7228	COVER POWER PWB BTM-MC3A
M11	610 301 7235	COVER DUCT LAMP TOP-MC3A
M12	610 301 7242	COVER DUCT LAMP BTM-MC3A
M13	610 301 5125	HOLDER HANDLE-MC3A
M14	610 301 7327	HOLDER AC-MC3A
M15	610 301 7334	HOLDER INTERLOCK-MC3A
M16	610 307 6386	MOUNTING DUCT-MH7A
M17	610 301 6153	MOUNTING DUCT LAMP-MC3A
M18	610 301 6276	OPTICAL LAMP-MC3A(BASE)
M19	610 301 7556	OPTICAL BASE BTM-MC3A
M20	610 301 7563	OPTICAL BASE TOP-MC3A

Key No.	Part No.	Description
SCREWS		
S1	411 098 1402	SCR S-TPG BIN 4X10
S2	412 063 7900	SPECIAL SCREW(SILVER)
S3	411 174 9308	BOLT HEX-SCT+SW+W 2.5X6
S4	411 174 9407	BOLT HEX-SCT 2.5X6
S5	411 183 1003	BOLT HEX-SCT+SW 2.5X6
OPTICAL PARTS		
L1	645 055 5312	ASSY,LENS,PROJECTION
	(Including Key No. L1-a to L1-c)	
L1-a	645 057 8496	MOTOR,LENS(F-UNIT)
L1-b	645 057 8502	MOTOR,LENS(Z-UNIT)
L2	645 055 1765	ASSY,PRISM(PBS)
(For MJ3-XT1100)		
L3	610 310 4591	ASSY,LCD PNL/PRISM-MJ7A
	(Including Key No. L3-a to L3-f)	
L3-a	645 059 0344	POLARIZED GLASS(OUT/R)
L3-b	645 055 8283	POLARIZED GLASS(OUT/G)
L3-c	645 059 0351	POLARIZED GLASS(OUT/B)
L3-d	645 063 7469	OPTICAL FILTER (WV-SA)-1 R
L3-e	645 063 7476	OPTICAL FILTER (WV-PO)S-1 G
L3-f	645 063 7476	OPTICAL FILTER (WV-PO)S-1 B
(For MH3-XT1600)		
L3	610 310 5352	ASSY,LCD PNL/PRISM-MH7A
	(Including Key No. L3-a to L3-f)	
L3-a	645 059 0344	POLARIZED GLASS(OUT/R)
L3-b	645 055 8283	POLARIZED GLASS(OUT/G)
L3-c	645 059 0351	POLARIZED GLASS(OUT/B)
L3-d	645 063 7469	OPTICAL FILTER (WV-SA)-1 R
L3-e	645 063 7476	OPTICAL FILTER (WV-PO)S-1 G
L3-f	645 063 7476	OPTICAL FILTER (WV-PO)S-1 B
L4	645 055 1529	LENS,INTEGRATOR(IN)
L5	645 055 1536	LENS,INTEGRATOR(OUT)
L6	645 055 1673	LENS,CONDENSER(OUT)
L7	645 055 1703	LENS,CONDENSER
L8	645 055 1710	LENS,CONDENSER(R)
L9	645 055 1727	LENS,RELAY(IN)
L10	645 055 1734	LENS,RELAY(OUT)
L11	645 055 2069	LENS,CONDENSER(IN)
L12	645 055 5367	LENS,PROJECTION-SM(BASE)
L13	645 059 8241	LENS,CONDENSER (G)
L14	645 055 5374	MIRROR(W-COLD)
L15	645 055 5381	MIRROR(B)
L16	645 055 5398	MIRROR(R)
L17	645 055 1796	OPTICAL FILTER(UV CUT431)
L18	645 059 0320	POLARIZED GLASS(IN/R)
L19	645 055 8214	POLARIZED GLASS(IN/G)
L20	645 059 0337	POLARIZED GLASS(IN/B)
L21	645 057 7994	PRE-POLARIZED GLASS(IN/B)
L22	645 055 5404	DICHROIC MIRROR (G)
L23	645 055 5411	DICHROIC MIRROR (B)

(MH7A) Jul. 2003 BB 400 Printed in Japan

SANYO Electric Co., Ltd.

■ Diagrams & Drawings

Schematic Diagrams
Printed Wiring Board Drawings

Model	Chassis No.
PLC-XT11	MJ7-XT1100
PLC-XT16	MH7-XT1600

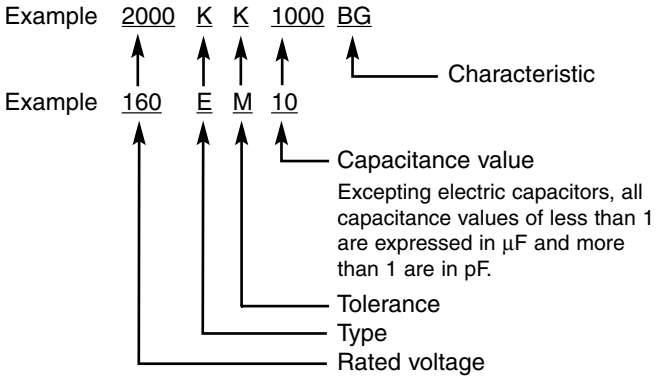
These schematic diagrams and printed wiring board drawings are part of the service manual original for chassis No. MH7-XT1600 and MJ7-XT1100, models PLC-XT16 and PLC-XT11. File with the service manual No. SM5110503-00.

Note:
All the information of part numbers and values indicated on these diagrams are at the beginning of production. To improve the performance, there may be some differences to the actual set. When you order the service parts, use service parts code mentioned on the parts list in this service manual.

■ Parts description and reading in schematic diagram

1. The parts specification of resistors, capacitors and coils are expressed in designated code. Please check the parts description by the following code table.
2. Some of transistors and diodes are indicated in mark for the substitution of parts name. Please check the parts name by the following code table.
3. Voltages and waveforms were taken with a video color bar signal(1Vp-p at 75 ohms terminated) and controls to normal.
4. Voltages were taken with a high-impedance digital voltmeter.

Capacitor Reading


Example 2000 K K 1000 BG
Characteristic
Example 160 E M 10
Capacitance value
Excepting electric capacitors, all capacitance values of less than 1 are expressed in µF and more than 1 are in pF.
Tolerance
Type
Rated voltage

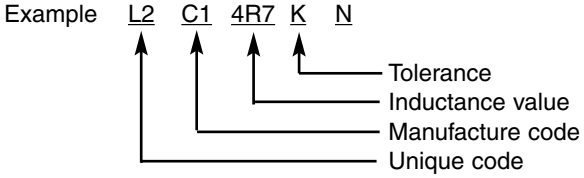
Material table

Mark	Material
E	Electrolytic
P	Electrolytic (non-polarized)
C	Ceramic (temperature compensation)
K	Ceramic
F	Polyester
N	Polypropylene
M	Metalized polypropylene
H	Metalized polypromylar
B	Ceramic (semiconductor)
G	Metalized polyestel
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

Tolerance table

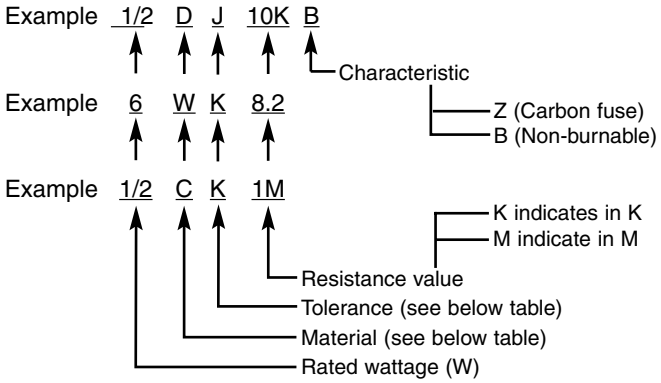
Mark	Tolerance
A	not specified
B	±0.1
C	±0.25
D	±0.5
F	±1
G	±2
E	±2.5
H	±3
J	±5
K	± 0
M	±20
N	±30
P	+100 -0
Q	+30 -10
T	+50 -10
U	+75 -10
V	+20 -10
W	+100 -10
X	+40 -20
Y	+150 -10
Z	+80 -20

Coil Reading



Mark	Tolerance (nH)	Mark	Tolerance (%)
C	±0.25	G	±2
D	±0.5	J	±5
S	±0.3	K	±10
A	±0.2	L	±15
		M	±20

Resistor Reading



Note: Resistor which is indicated with resistance value only are 1/6W carbon resistor. Resistor which is indicated with material, tolerance and value are 1/4W rated wattage.

Material table

Mark	Material
D	Carbon
N	Metal film
S	Oxide metal film
C	Solid
G	Metal glaze
W	Wire wounding or cement
H	Ceramic
F	Fusible

Tolerance table

Mark	Tolerance
A	±0.05
B	±0.1
C	±0.25
D	±0.5
F	±1
G	±2
J	±5
K	±10
M	±20
P	+5 -15
Z	used in 0 ohm

Diode/Transistor Type Reading

Diode

Mark	Type number
R	1S2076A,1S2473,1N4148
AA	1S2076A,1S2473,1SS133,1N4148

Transistor

(1) NPN type

Mark	Type number				
--	2SC536	2SC945A	2SC1815	2SC1740S	
AD	NF, NG	PA, QA	Y, GR	Q, R, S	
AE	NF, NG	PA, QA, RA	O, Y, GR	Q, R, S	

(2) PNP type

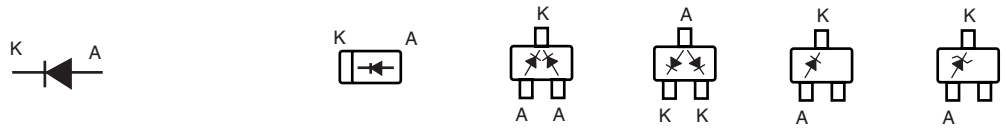
Mark	Type number				
--	2SA608	2SA564A	2SA1015	2SA933S	
AB	NF	R	Y, GR	R	
AC	NF	Q, R	O, Y, GR	Q, R	

(3) Chip type

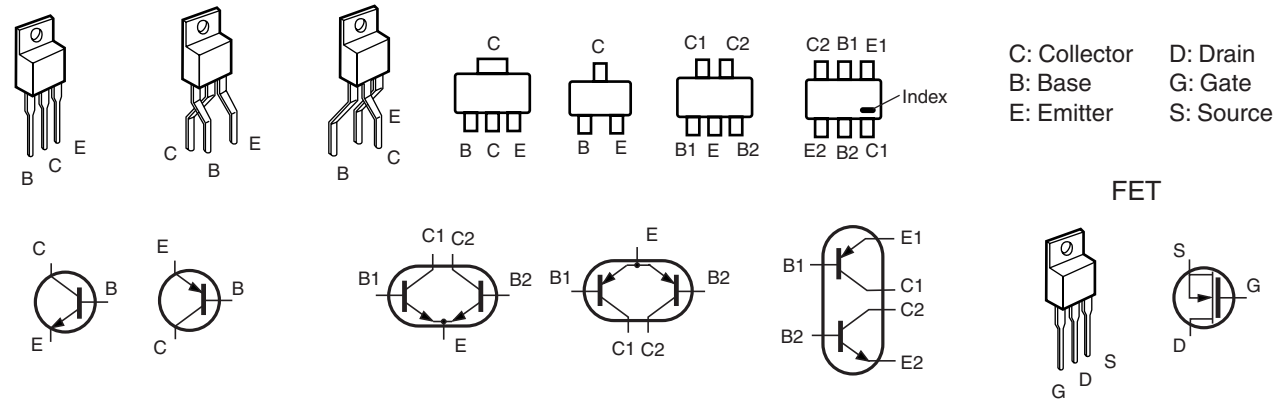
Mark	Type number				
--	2SA1179/N	2SA1037K	2SA1037AK	2SC2812/N	2SC2412K
AJ	M6, M7	R, S	R, S		
AH				L6, L7	R, S

■ Pin description of diode, transistor and IC

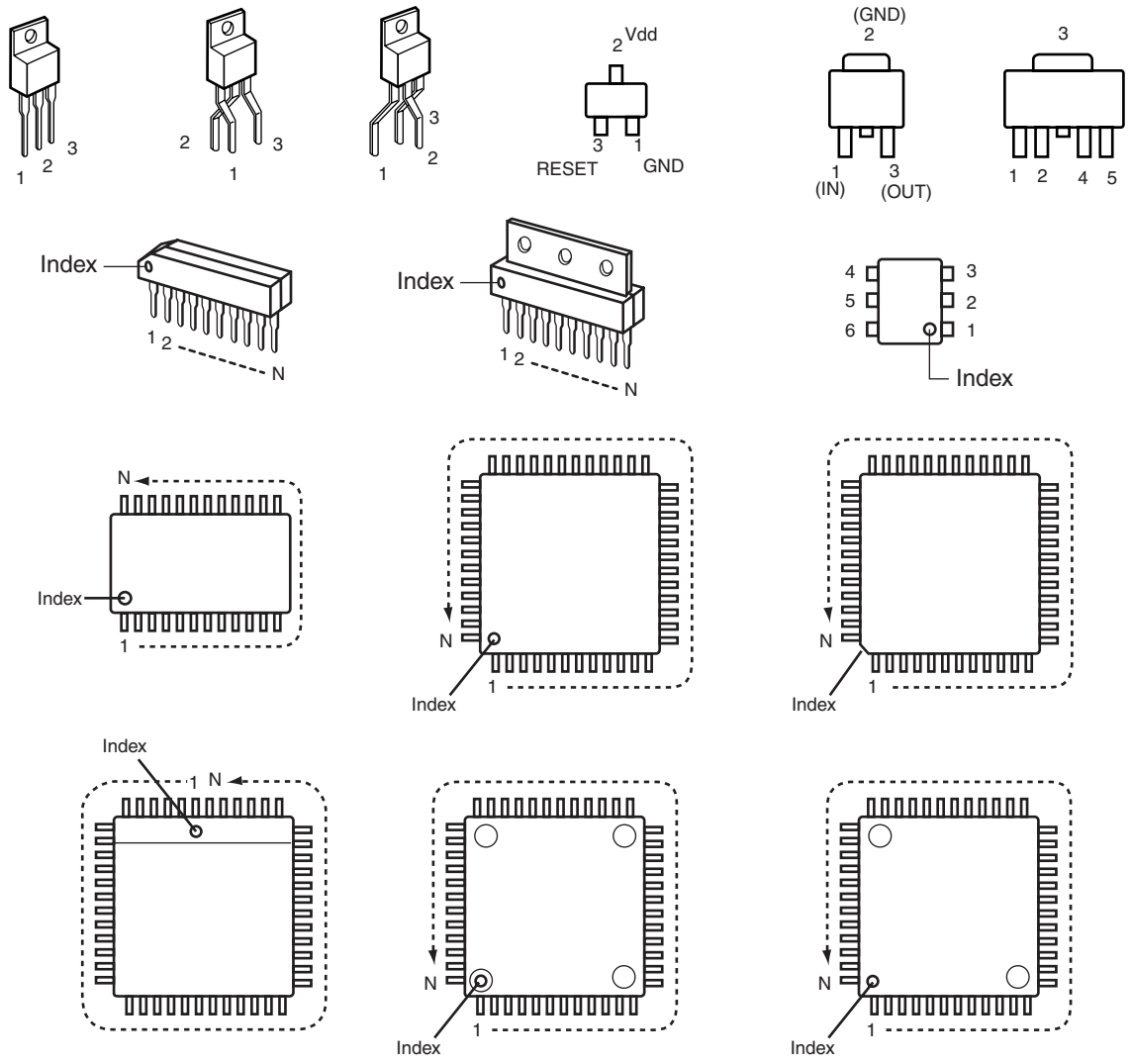
● Diode



● Transistor/FET



● IC



■ Schematic Diagrams

POWER AC

POWER DC

HOT

COLD

SENSOR

RC FRONT

AUDIO

LENS SENSOR

CONTROL

MAIN

(PAGE.3-8)

COM

(PAGE 2)

AV

(PAGE 2)

CAUTION

Components indicated by a mark ⚠ in this schematic diagram have the special significance in the safety. It is therefore, particularly recommended that the replacement of those parts must be made by exactly the same parts.Must be used with a specified fuse. Unauthorized substitutions may result in fire or accident.
This projector is isolated from AC line by using the internal converter transformer.
Please pay attention to the following notes in servicing.

1. Do not touch the part on hot side (primary circuit) or both parts on the hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring the voltages and waveform.

COM

RGB-SW.
IC3001 AD8185ARU

COMPUTER-1 ANALOG-IN

PC1 IN

COMPUTER-2 DVI-I-IN DIGTAL/ANALOG

PC2 IN

MONITOR OUT

IC7302 24LC21A/SNP

IC7001 TC7W125FU

IC7003 TC7W125FU

IC7002 TC7WT125FU

DDC-SW. IC7301 TC4053BFP

SYNC-SW IC3022 BD7600FV

IC3021 BD7600FV

SYNC-DET. IC7201 BA7078AF

IC7221 SN74AHCT1G14

IC7226 SN74AHCT1G14

RGB-BUFFER IC4001 LT1399CS

IC4002 TC7W241FU

MAIN K8A/K8W

MAIN K8B/K8X

POWER DC K26D

AV

VIDEO-IN

S-VIDEO

VIDEO

VIDEO AUDIO_IN

PC1 AUDIO_IN

PC2 AUDIO_IN

AUDIO-IN

R/C RECEIVER

CONTROL PORT

USB

EXT.SP

IC2091 TC7SH00FU

AUDIO-SW IC5001 TC4052BF

IC3801 TC7SH00FU

IC3852 UPD78F9801GB

IC3851 UPD789101AMC

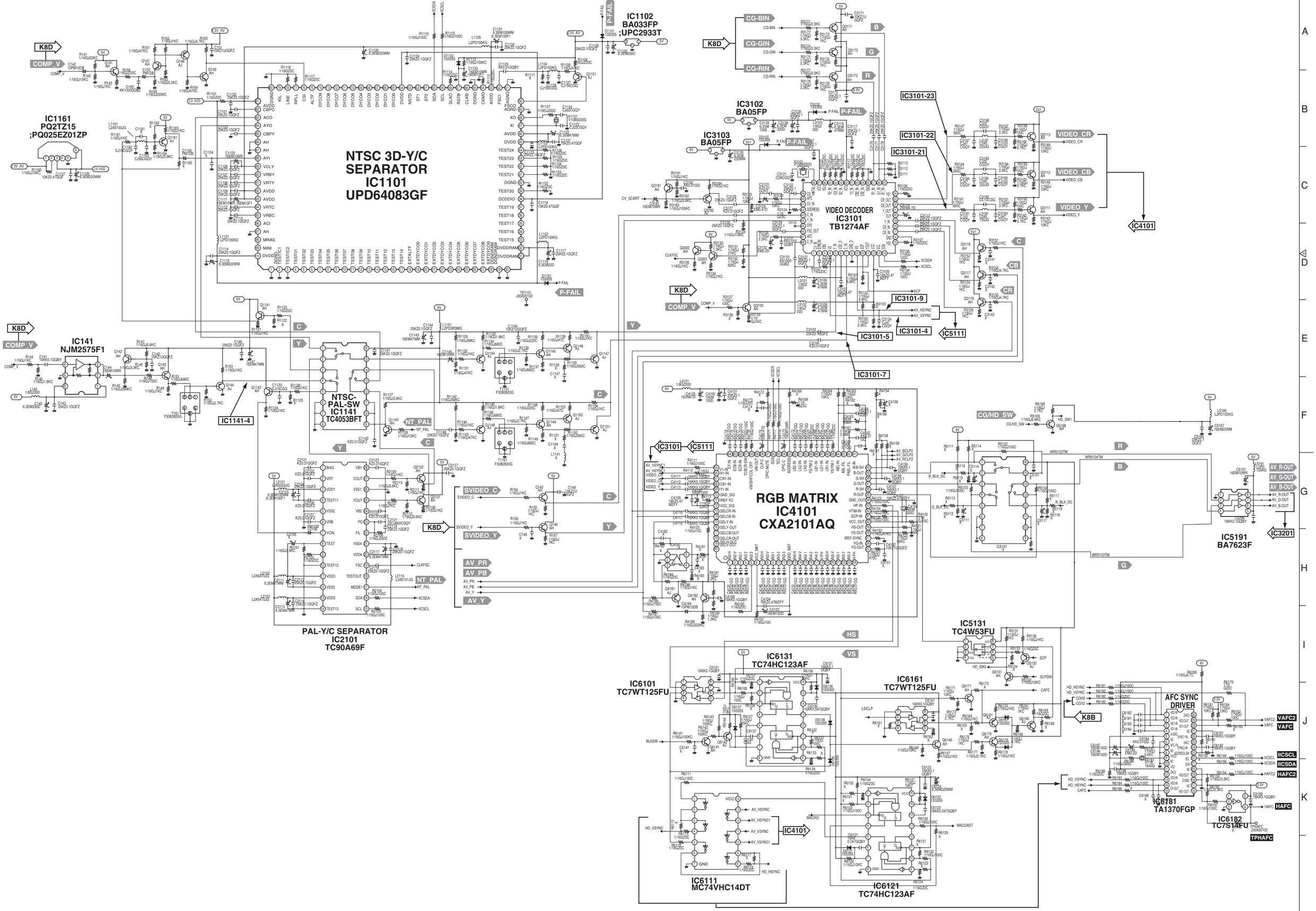
MOUSE CONTROLLER

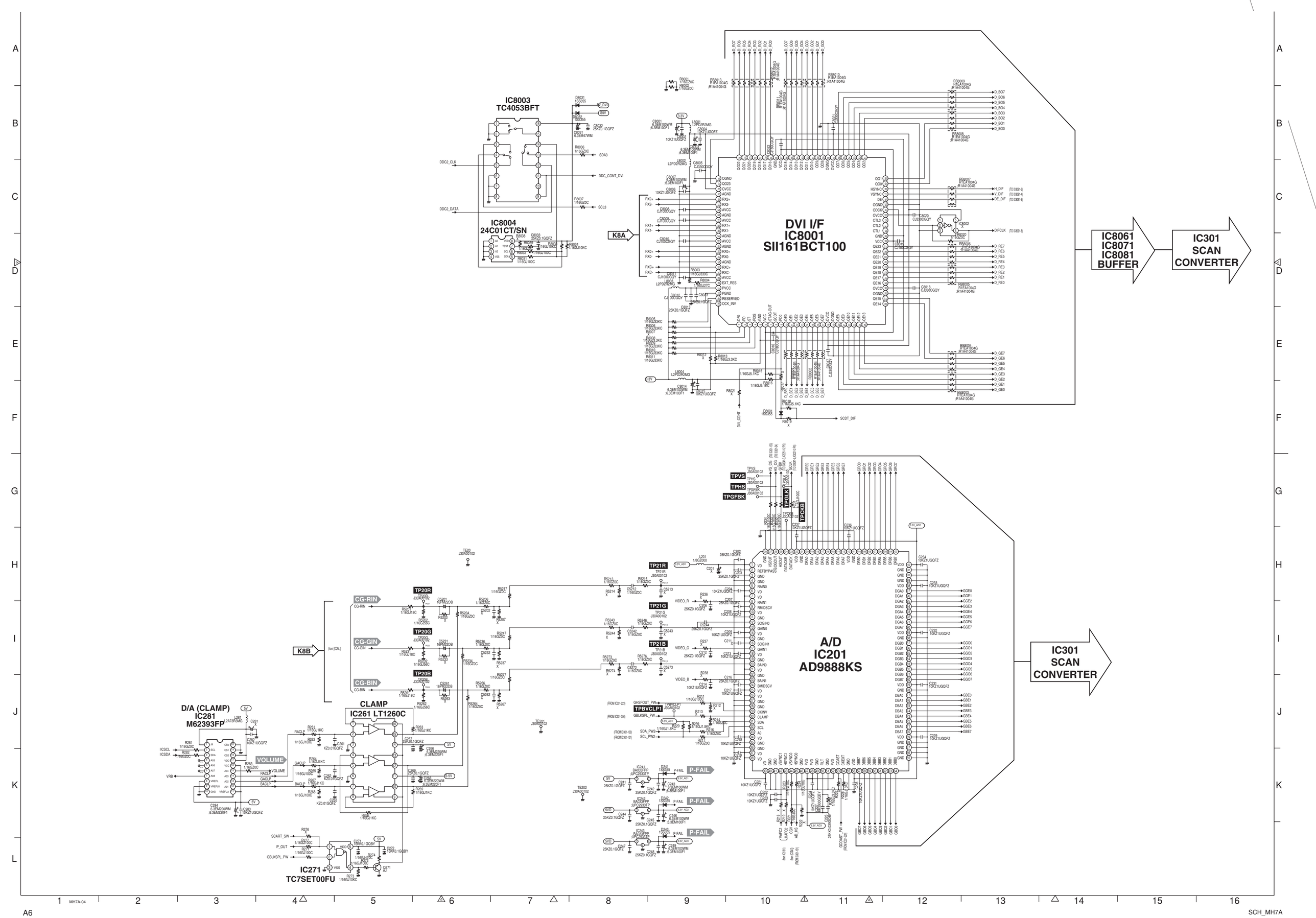
RS-232C DRIVE IC3806 HIN232CB

MAIN K8C

MAIN K8D

	PC1	PC2	VIDEO
AU_SW1	L	H	L
AU_SW2	L	L	H


NTSC 3D-Y/C SEPARATOR IC1101 UPD64083GF
IC1161 PQ2TZ15 ;PQ025EZ01ZP
IC1102 BA033FP ;UPC2933T
IC3102 BA05FP
IC3103 BA05FP
VIDEO DECODER IC3101 TB1274AF
IC3101-23
IC3101-22
IC3101-21
VIDEO_CR
VIDEO_CB
VIDEO_Y
IC4101
IC3101-9
IC3101-4
IC5111
IC3101-5
IC3101-7
IC141 NJM2575F1
NTSC-PAL-SW IC1141 TC4053BFT
IC1141-4
NT_PAL
SVIDEO_C
SVIDEO_Y
AV_PR
AV_PB
AV_Y
PAL-Y/C SEPARATOR IC2101 TC90A69F
RGB MATRIX IC4101 CXA2101AQ
IC3101
IC5111
IC4101
IC6101 TC7WT125FU
IC6131 TC74HC123AF
IC6161 TC7WT125FU
IC6111 MC74VHC14DT
IC6121 TC74HC123AF
IC5131 TC4W53FU
AFC SYNC DRIVER IC6181 TA1370FGP
IC6182 TC7S14FU
IC5191 BA7623F
IC3201
AV_R-OUT
AV_G-OUT
AV_B-OUT
VAFC2
VAFC
IICSCL
IICSDA
HAFC2
HAFC
TPHAFC
K8D
COMP_V
CG-BIN
CG-GIN
CG-RIN
CG/HD_SW
P-FAIL
HS
VS
SCP
SCPSW
CAFC
MACOAST
MACRO


IC8003
TC4053BFT
IC8004
24C01CT/SN
DDC2_CLK
DDC2_DATA
DDC_CONT_DVI
SDA3
SCL3
K8A
DVI I/F
IC8001
SII161BCT100
IC8061
IC8071
IC8081
BUFFER
IC301
SCAN
CONVERTER
SCDT_DIF
P-FAIL
K8B
CG-RIN
CG-GIN
CG-BIN
CLAMP
IC261 LT1260C
D/A (CLAMP)
IC281
M62393FP
VOLUME
IC271
TC7SET00FU
A/D
IC201
AD9888KS
TPVS
TPHS
TPGFBK
TPGCLK
TPGDB
TP21R
TP21G
TP21B
TP20R
TP20G
TP20B
IC301
SCAN
CONVERTER

IC4231
ICS1523M

PLL
IC6381
SI-3025LSA

IC4281

IP CONVERTER
IC4201
TC240C4FTB
<TOP_VIEW>

IC4251
IC4261
IC4271

IC6181 AFC

BUFFER
IC4201 TC74VCX16374FT
IC4261 TC74VCX16374FT
IC4271 TC74VCX16374FT
IC4251 TC74VCX16374FT

IC4201
IP
CONVERTER

MEMORY
IC6301
MS82V16520

MEMORY
IC6321
MS82V16520

MEMORY
IC6341
MS82V16520

MEMORY
IC6361
MS82V16520

BUFFER
IC4281
TC74LCX541FT

IC6181
IC6182

A/D
IC3201
MB40C348VPFV

IC4101 RGB MATRIX

IC5191

D/A (BLK/CLP)
IC3291
M62392FP

IC3251
BA033FP
:UPC2933T

IC3252
BA033FP
:UPC2933T

IC3253
BA033FP
:UPC2933T

P-FAIL

IC8051
TC74LCX74FT

IC8041
TC74LCX541FT

IC391
BA033FPP

IC392
SI-3025LSA

IC8061
IC8071
IC8081

IC8001
DVI I/F

IC301

IC201
A/D

SCAN CONVERSION
SYSTEM CONTROL
IC301
PW365-10U

IC304
24LC16BT/SN
CONTROL
MEMORY

IC306
TC7S32FUP

SRAM
IC341
IC61LV6416-15T

FLASH ROM
IC351
MBM29LV800T

IC361
ICS512MT
CLOCK
DRIVER
IC362
ICS512MT

BUFFER
IC8061
TC74VCX16244FT

BUFFER
IC8071
TC74VCX16244FT

BUFFER
IC8081
TC74VCX16244FT

BUFFER
IC8091
TC74LCX541FT

IC401
DIGITAL GAMMA
CORRECTION

IC301
SCAN
CONVERTER

IC1571
BA12FP

2.5V REG.
IC451
SI-3025LSA

IC1561
L88MS05TL

D/A (COM/RGT/NRS)
IC1501
M62399FP

D/A (REF/CENT)
IC1531
M62399FP

DIGITAL
GAMMA CORRECTION
IC401
L3E07052K0A

D/A S&H-B1
IC501
L3E06070D0A

B-LEVEL SHIFT
IC3501
L3E01040F0A

D/A,
S&H-G1
IC531
L3E06070D0A

G-LEVEL SHIFT
IC3531
L3E01040F0A

D/A, S&H-R1
IC561
L3E06070D0A

R-LEVEL
SHIFT
IC3561
L3E01040F0A

R-LEVEL SHIFT
IC2531
LM7171AIMX
;LM7171BIMX

NRS
IC2561
LT1206CS8

P-FAIL

TP501

TP531

TP561

TP2531

B-LCD
PANEL

G-LCD
PANEL

R-LCD
PANEL

FAN_DRIVE

DHS

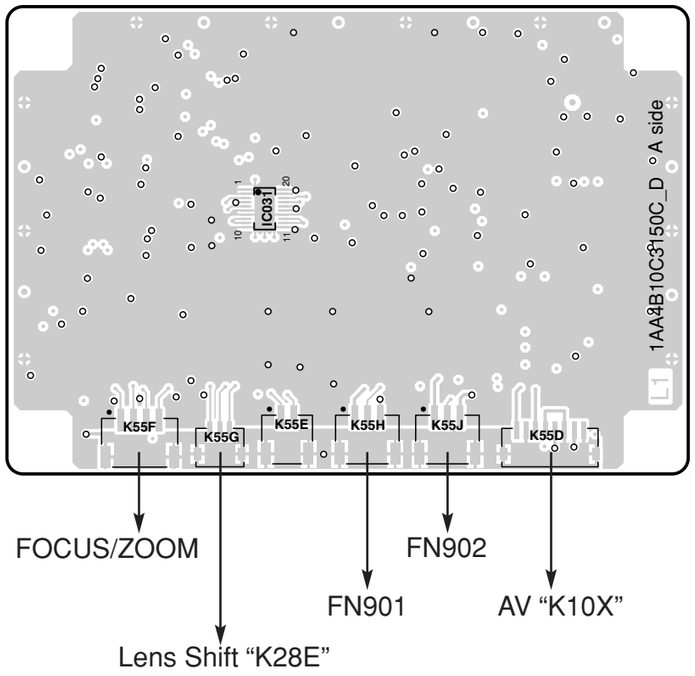
DVS

CONTROL K68A
RC FRONT K28A
LAMP BALAST K8L
SENSOR K28B
LENS
AUDIO K56B
POWER K66F
POWER K26C
POWER K26B
COM K10P
COM K10Q
AV K20P
AV K20Q
IC4891 TC7SET00FU
LAMP SW
P-FAIL
READY LED-ON: L
LAMP REP. LED-ON: L
WARNING LED-ON: L
POWER
D/A (FAN CONTROL) IC4881 M62393FP
CG/HD-SW
I/O EXPANDER IC1801 M66500FP
ECO_SW
L: Normal
IC4801 BA033FP
IC1851 TC7W240FU
IC1841 TC7W126FU
IC4811 TC74LCX244FT ;HD74LVC244AT
IC4821 TC74LCX244FT ;HD74LVC244AT
IC9882 SN74LV14APWR
IC9881 M66230FP
IC9861 M66230FP
IC4831 SN74LVCC4245APWR
IC811 TC7S04FP
IC812 HD74LVC244AT
IC813 TC7SZ08FUP
IC9831 TC7W02FU
IC9821 HD74LVC244AT
IC301 VIDEO
IC681 AFC
IC8001 DVI I/F
IC1101 IC3101 IC4102
IC805 TC74ACT08FT
SRAM IC804 IS61C6416
FLASH ROM IC803 MBM29F160BE
CPU IC801 HD64F7045F28
IC802 MN1382
IC1802 TC74ACT138FT
IC814 TC74LCX541FT
IC816 TC74ACT541FT
IC815 TC74LCX541FT
USB CONTROLLER IC9801 ML60851CTB ;ML60851DTB
SERVICE MEMORY IC808 24LC16BT/SN
TEMP. SENSOR IC1871 LM76CHMX
TEMP. SENSOR IC1872 LM76CHX-5P
TEMP. SENSOR IC1873 LM76CHX-5P
Power-ON: L
Power-ON: H
PC-Analog: L
CG1: L
Mute
Top: L
Bottom: L
Comp: L
S-Video: L
AV/CG
AV/CG1
MH7A-08
A10
SCH_MH7A

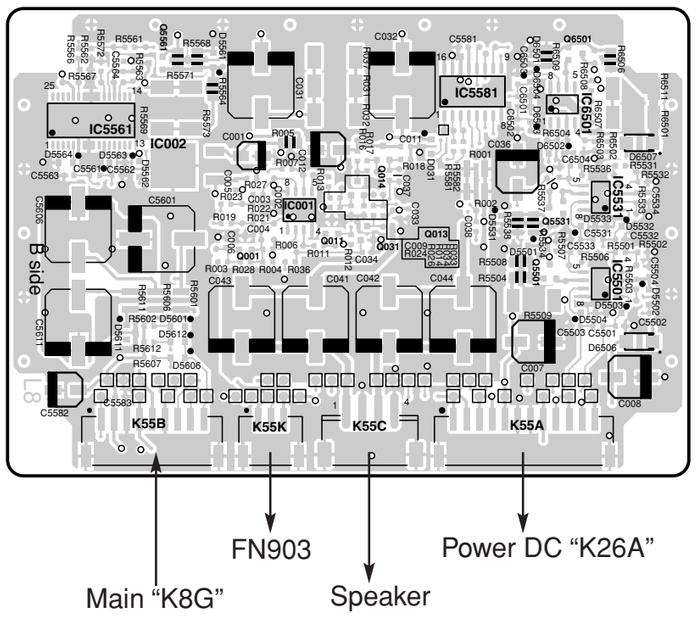
■ Printed Wiring Board Diagrams

> **⚠ CAUTION**
>
> This projector is isolated from AC line by using the internal converter transformer.
> Please pay attention to the following notes in servicing
> 1. Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
> 2. Do not shorten the circuit between hot and cold sides.
> 3. The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

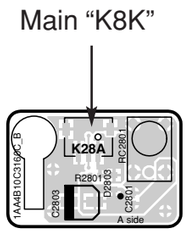
Audio (SIDE:A)



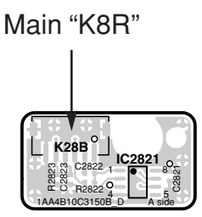
Audio (SIDE:B)



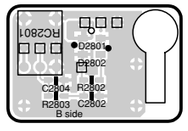
RC Front (SIDE:A)



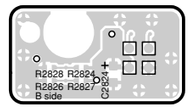
Sensor (SIDE:A)



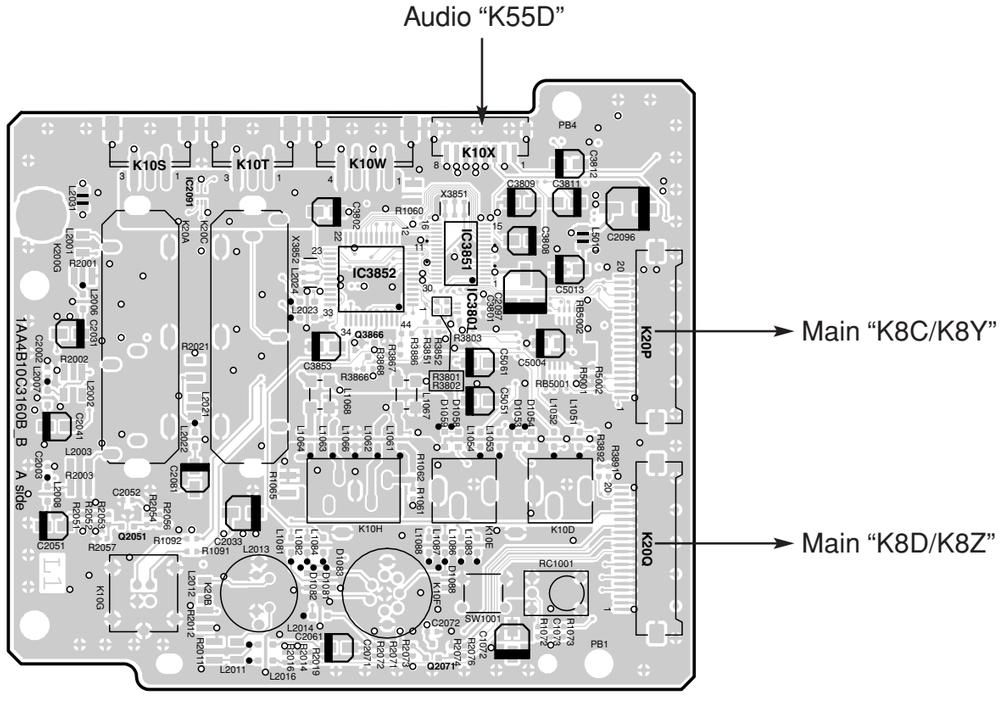
RC Front (SIDE:B)



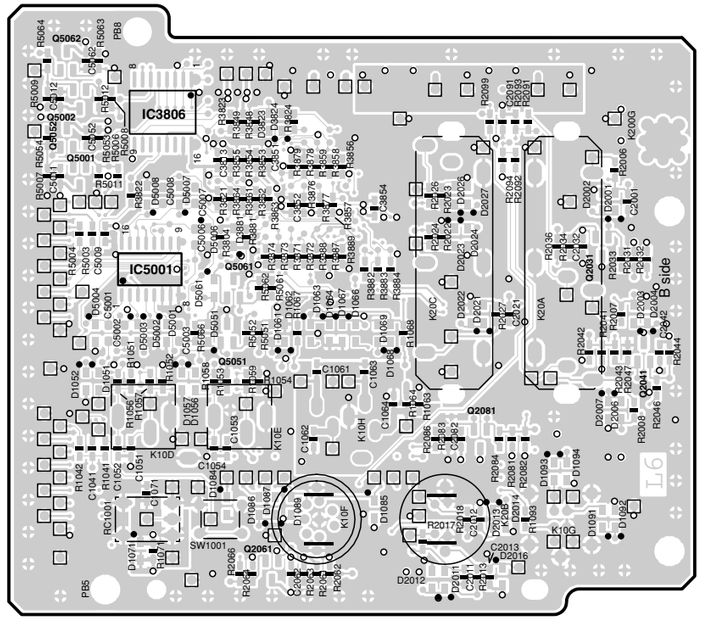
Sensor (SIDE:B)



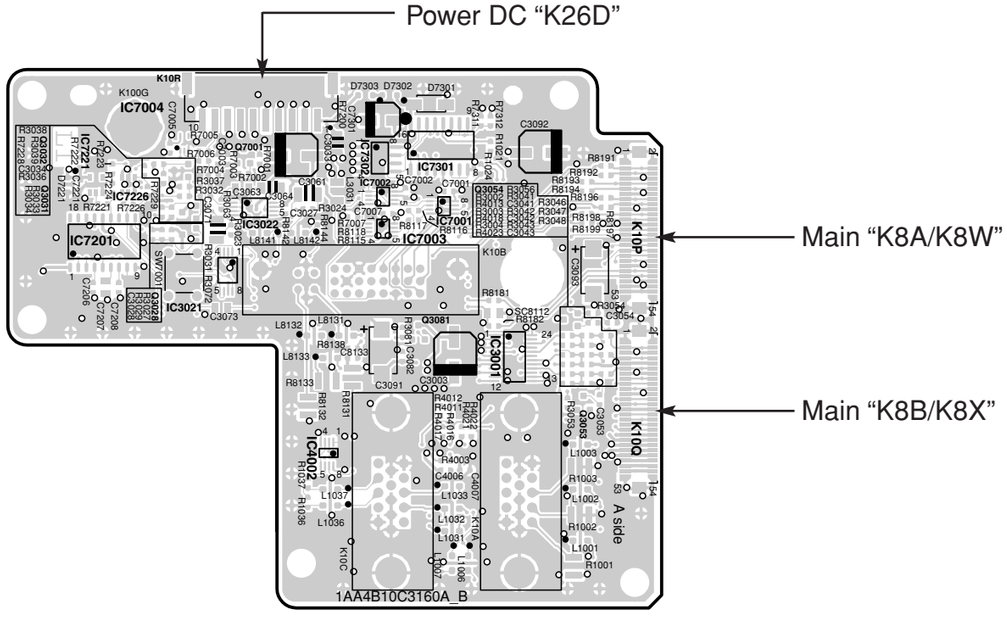
AV (SIDE:A)



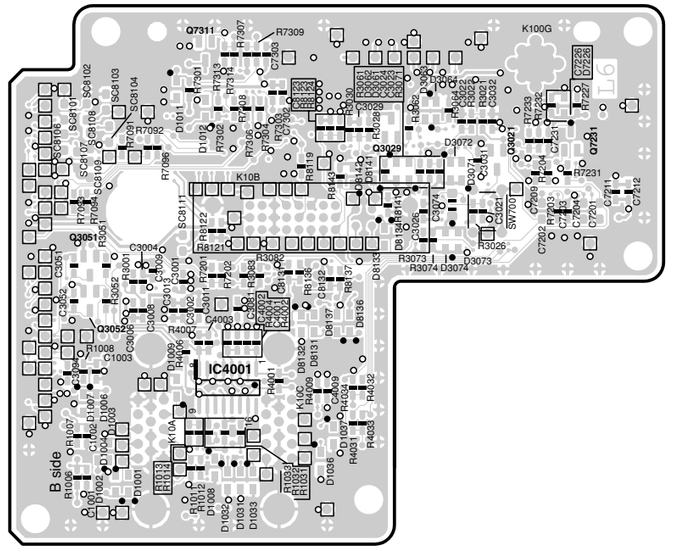
AV (SIDE:B)



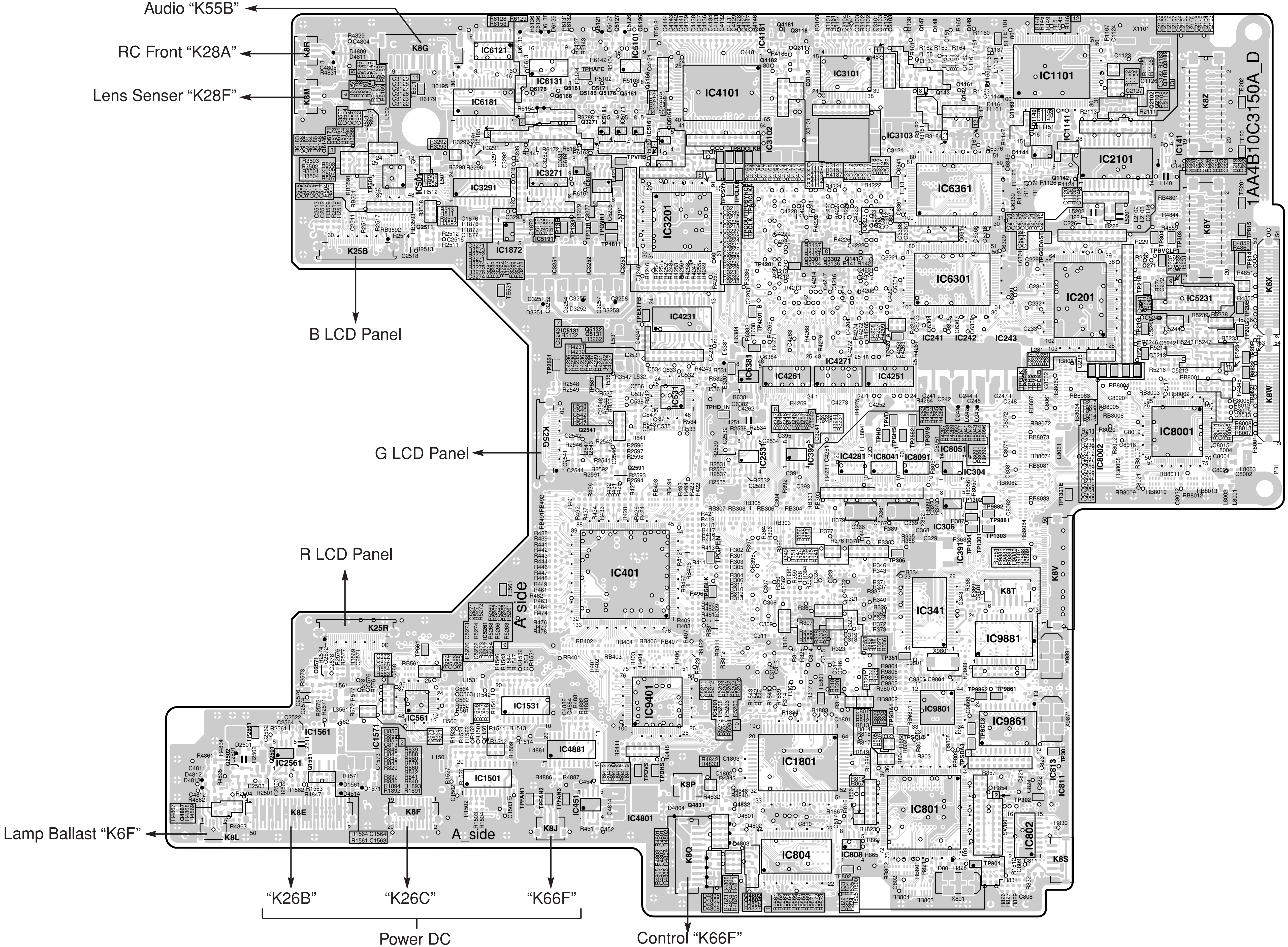
COM (SIDE:A)



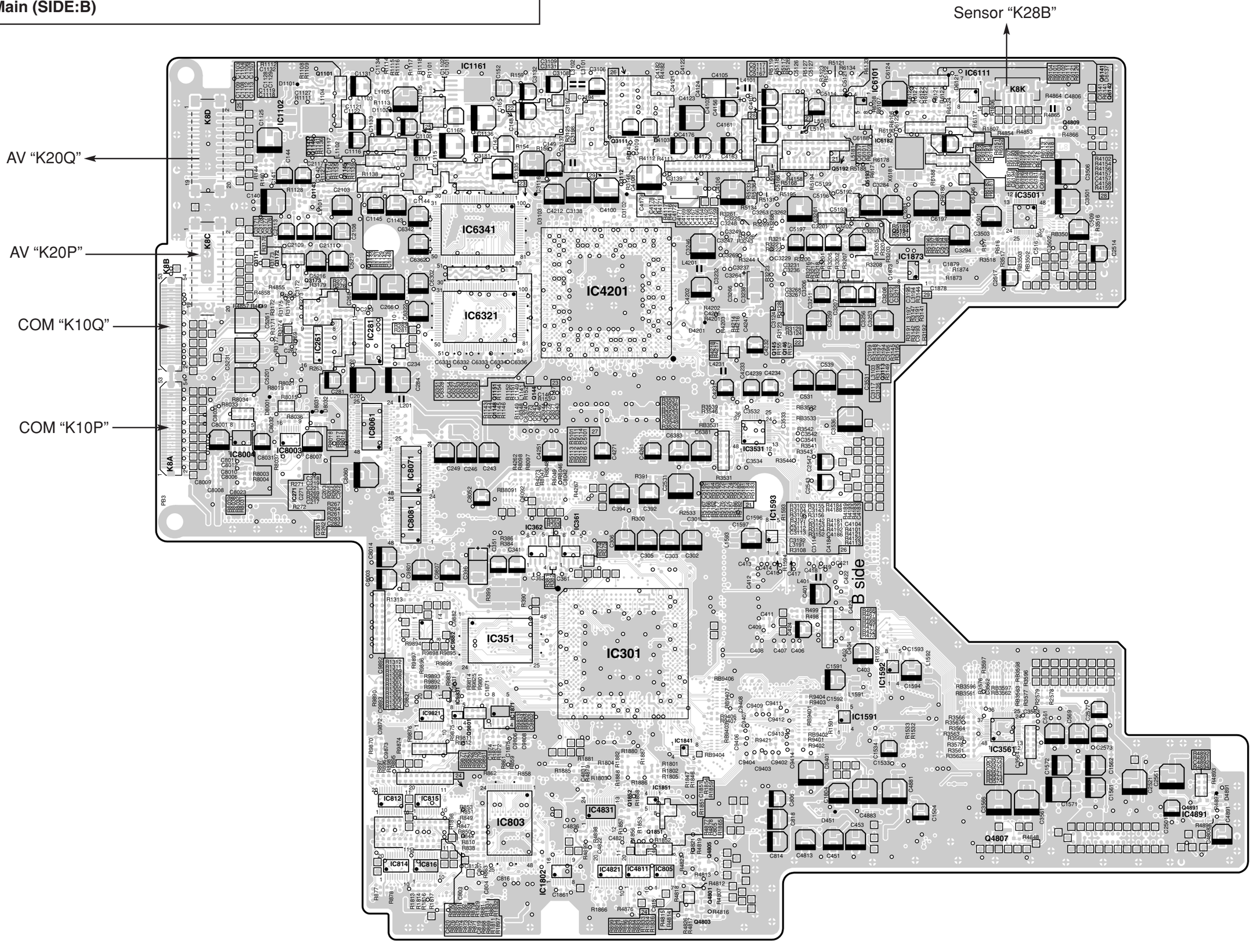
COM (SIDE:B)



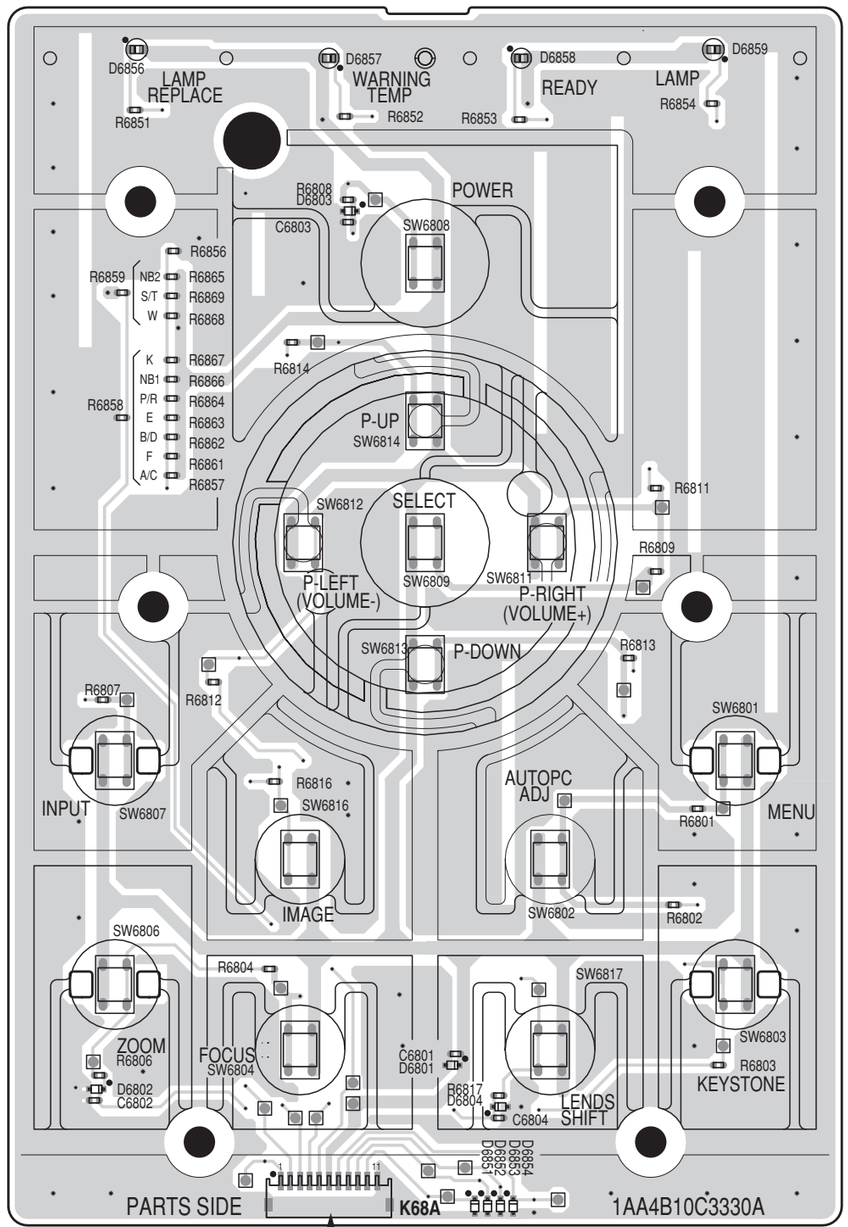
Main (SIDE:A)


Audio "K55B"
RC Front "K28A"
Lens Senser "K28F"
B LCD Panel
G LCD Panel
R LCD Panel
Lamp Ballast "K6F"
"K26B"
"K26C"
"K66F"
Power DC
Control "K66F"
A_side
A side
1AA4B10C3150A_D

Main (SIDE:B)

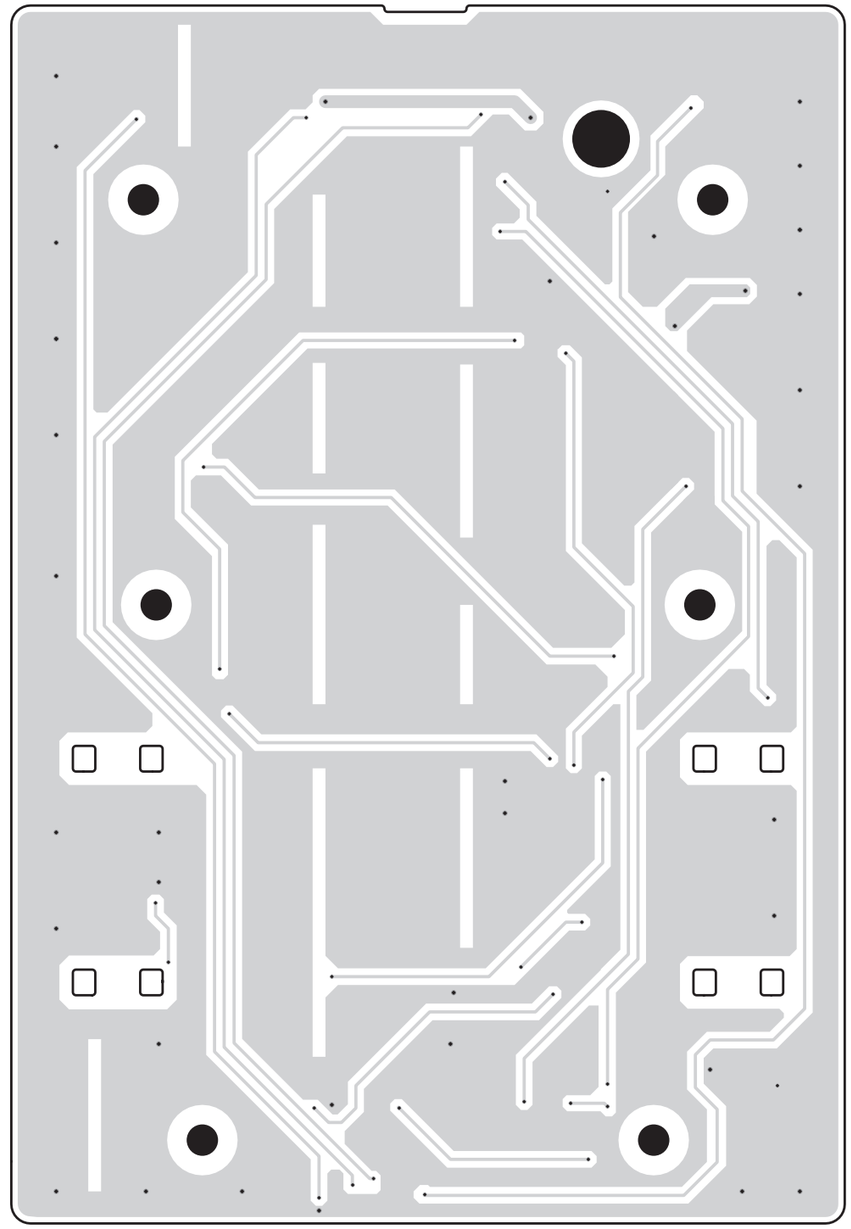

Sensor “K28B”
AV “K20Q”
AV “K20P”
COM “K10Q”
COM “K10P”
K8D
K8C
K8B
K8A
K8K
IC1161
IC1102
IC6341
IC6321
IC4201
IC6111
IC6101
IC3501
IC1873
IC261
IC281
IC8061
IC8004
IC8003
IC8071
IC8081
IC8091
IC362
IC361
IC351
IC301
IC803
IC1802
IC812
IC815
IC814
IC816
IC4831
IC4821
IC4811
IC805
IC1851
IC1841
IC1591
IC1592
IC1593
IC3561
IC3531
IC4891
Q4807
B side

Control (SIDE:A)

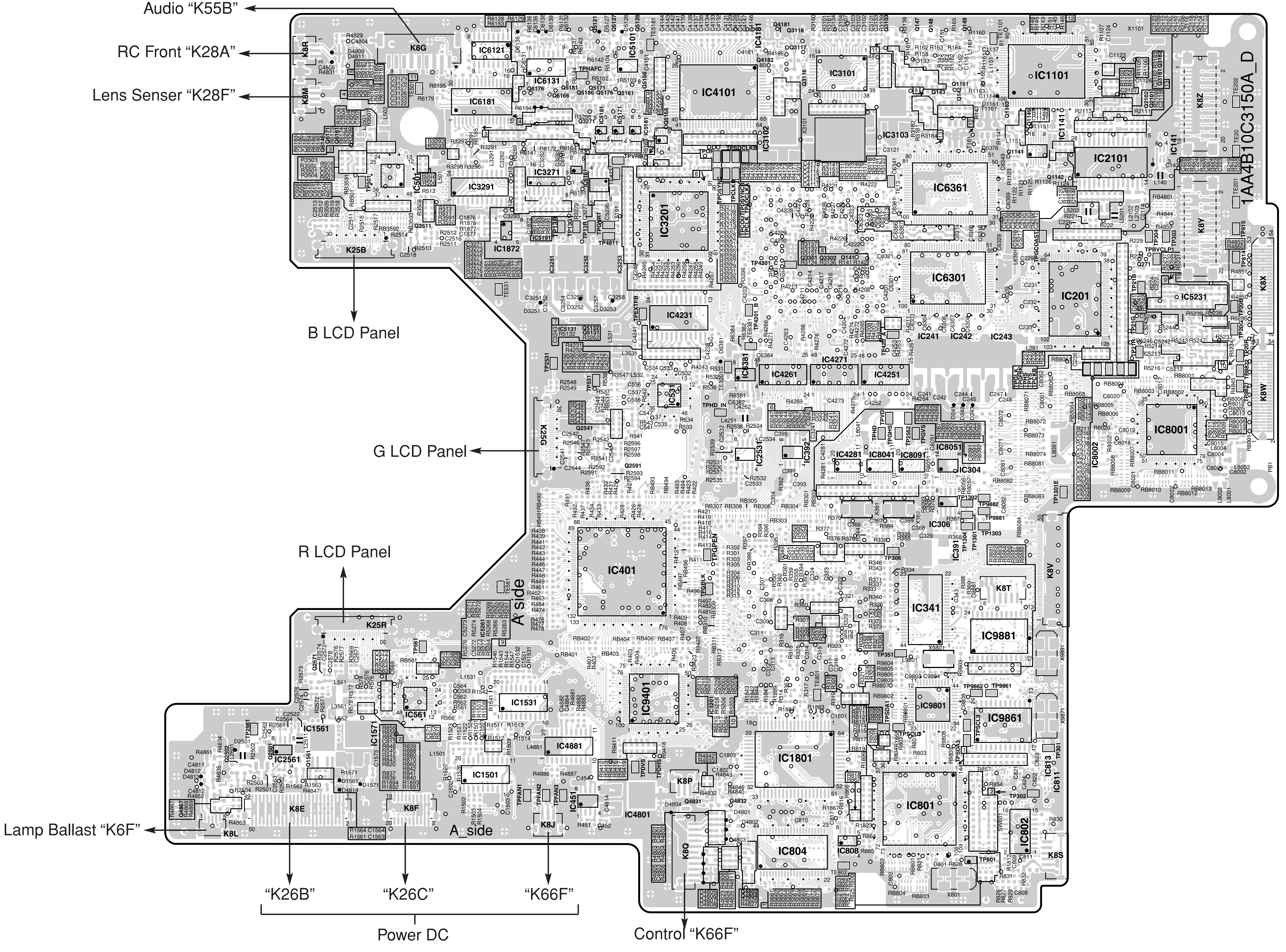


Main “K8Q”

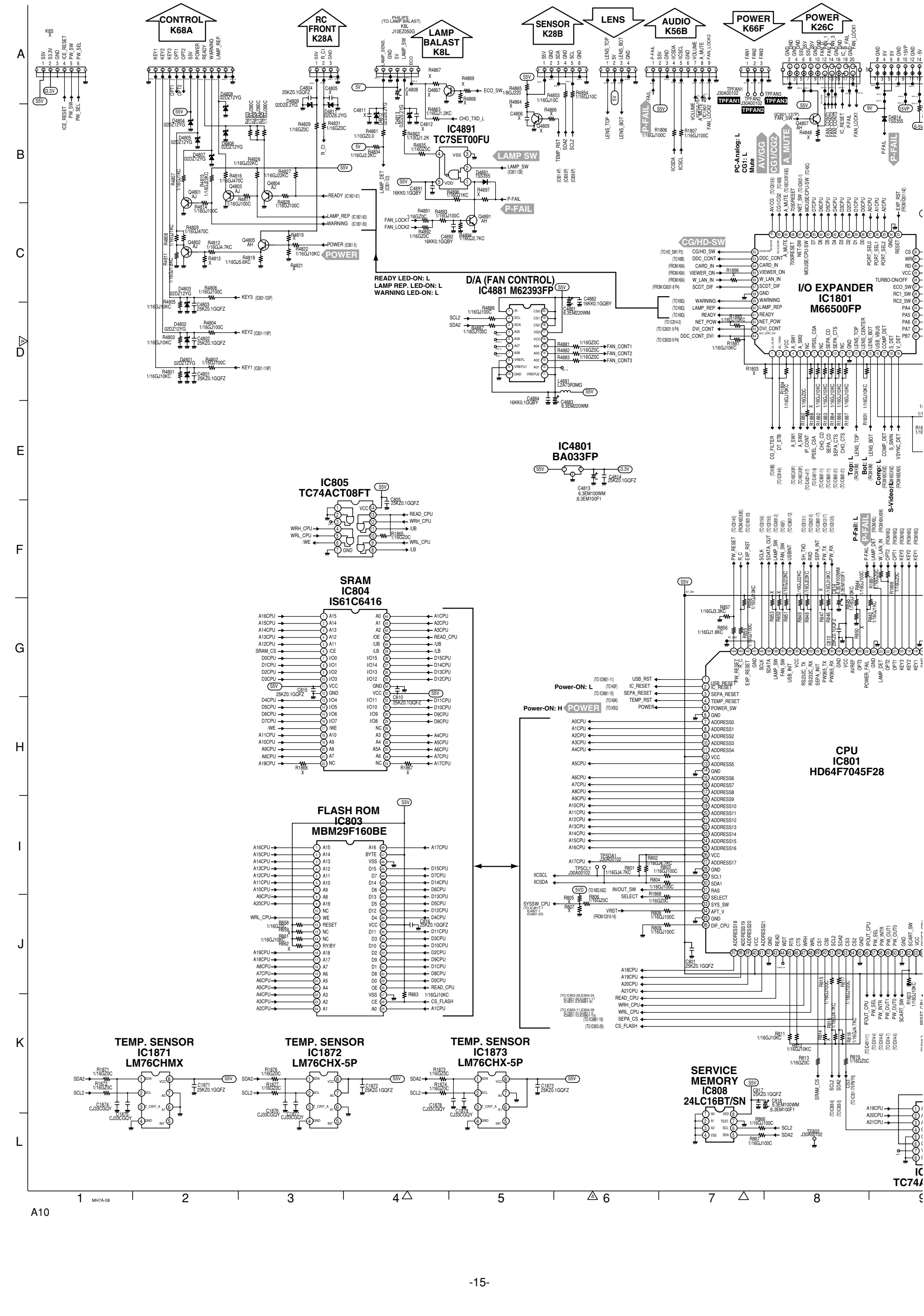
Control (SIDE:B)



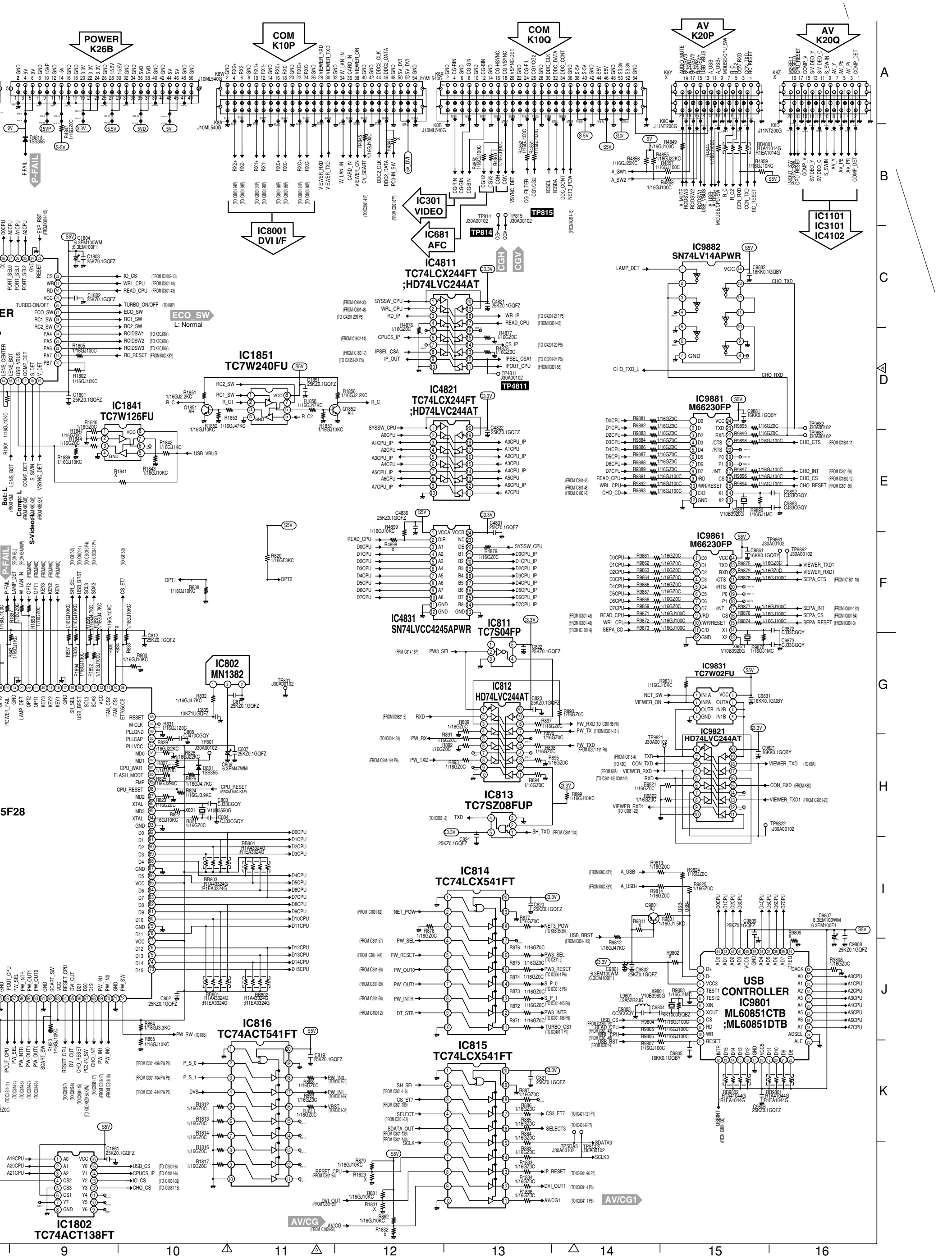
Main (SIDE:A)


Audio "K55B"
RC Front "K28A"
Lens Senser "K28F"
B LCD Panel
G LCD Panel
R LCD Panel
Lamp Ballast "K6F"
"K26B"
"K26C"
"K66F"
Power DC
Control "K66F"
A_side
1AA4B10C3150A_D

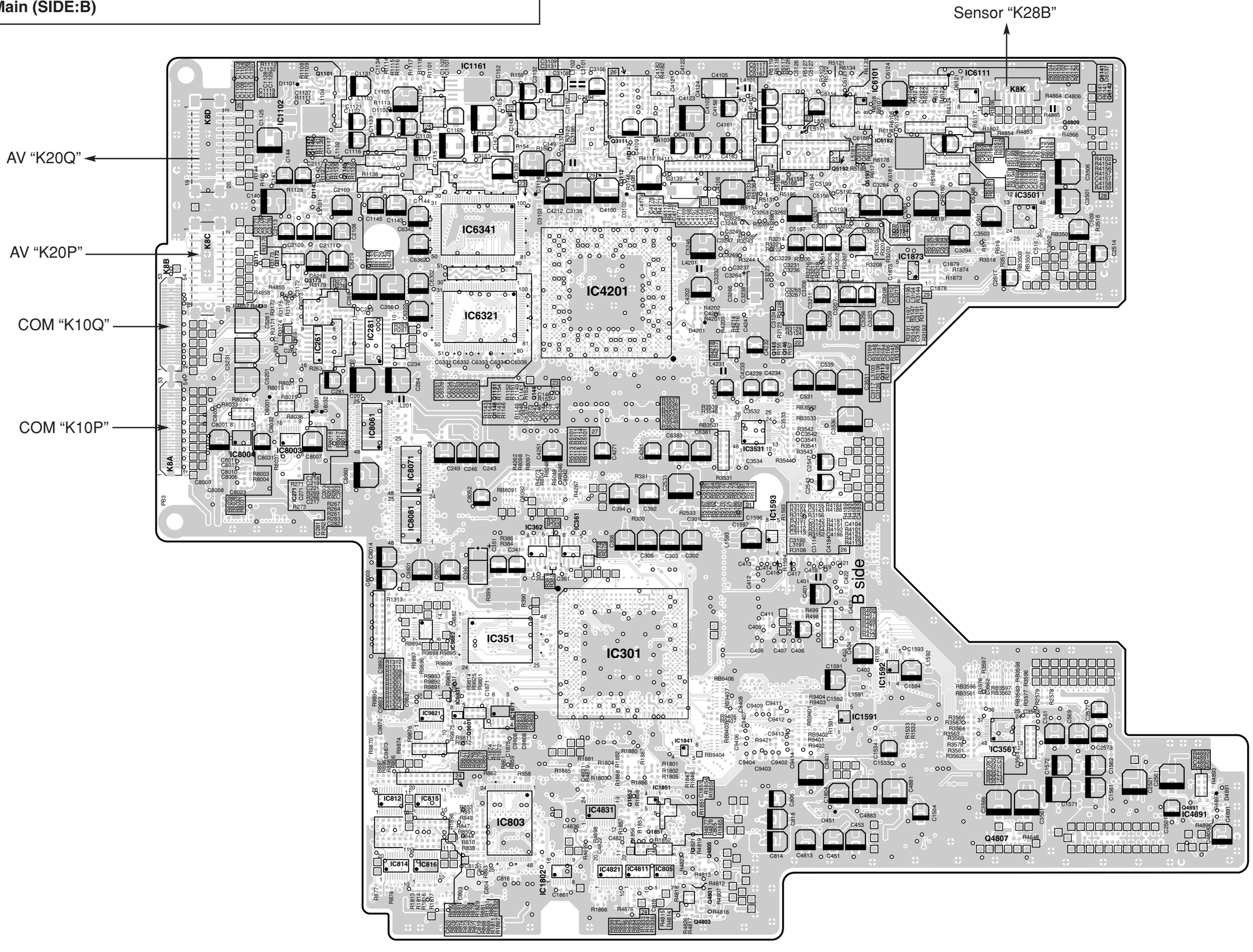
Schematic Diagrams PLC-XT11/16 A10 [Left]



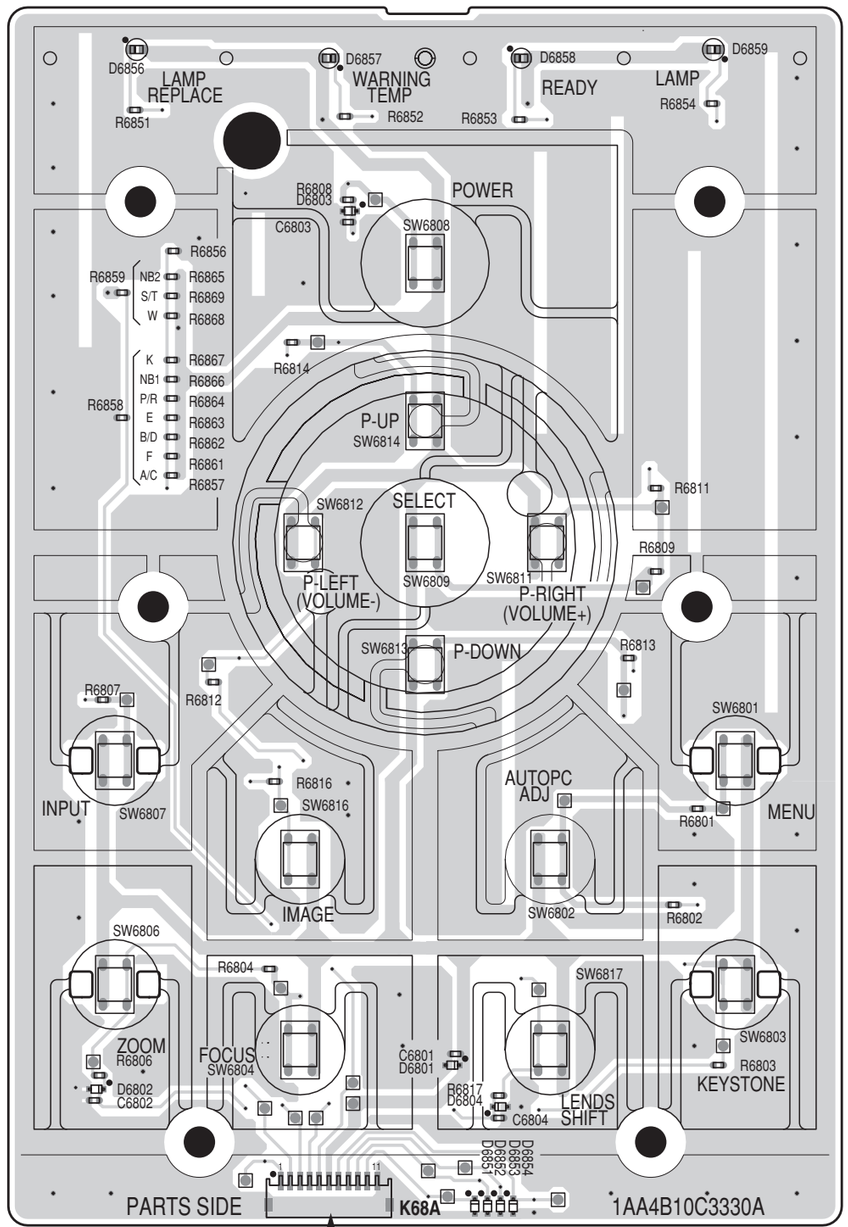
Schematic Diagrams PLC-XT11/16 A10 [Right]



Main (SIDE:B)

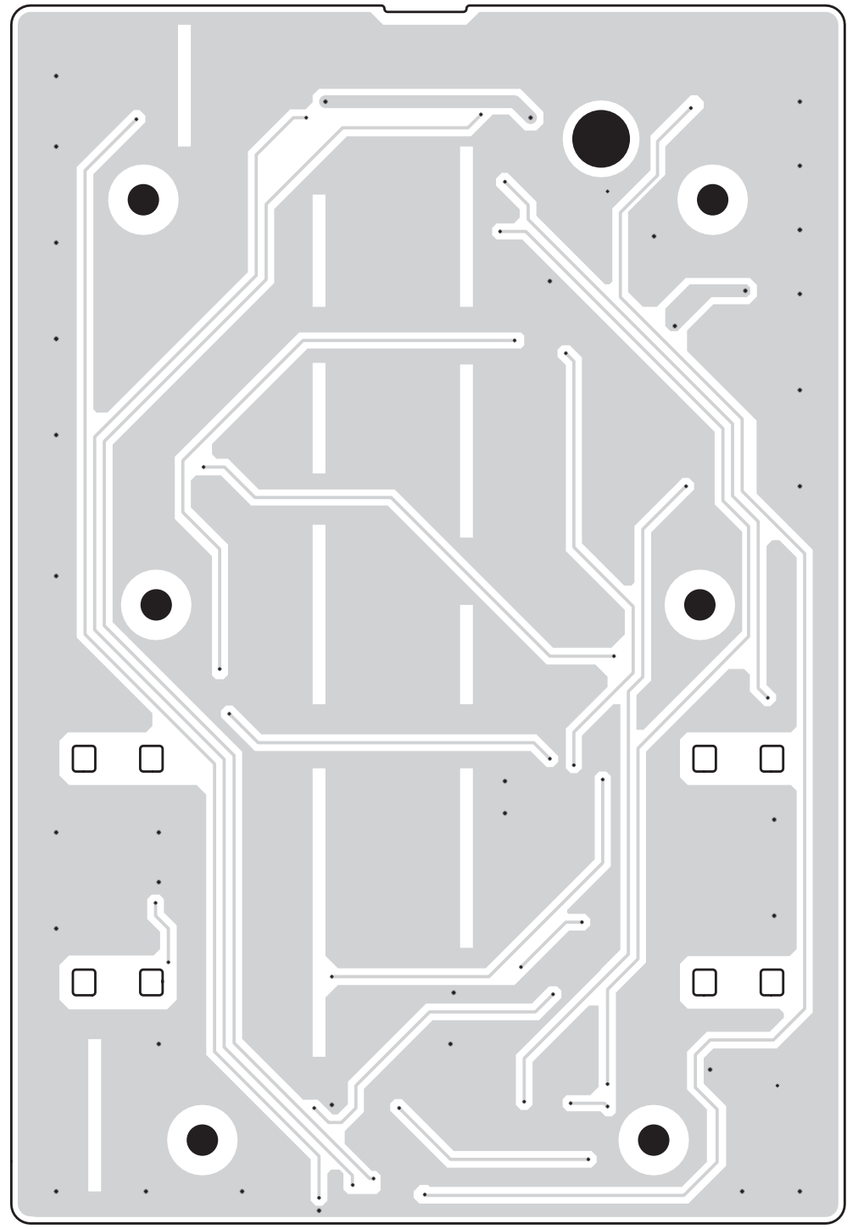

Sensor “K28B”
AV “K20Q”
AV “K20P”
COM “K10Q”
COM “K10P”
K8D
K8C
K8B
K8A
K8K
IC1161
IC1102
IC6341
IC6321
IC4201
IC6111
IC6101
IC3501
IC1873
IC261
IC281
IC8061
IC8004
IC8003
IC8071
IC8081
IC8091
IC362
IC361
IC351
IC301
IC803
IC1802
IC812
IC815
IC814
IC816
IC4831
IC4821
IC4811
IC805
IC1851
IC1841
IC1591
IC1592
IC1593
IC3561
IC3531
IC4891
Q4807
B side

Control (SIDE:A)



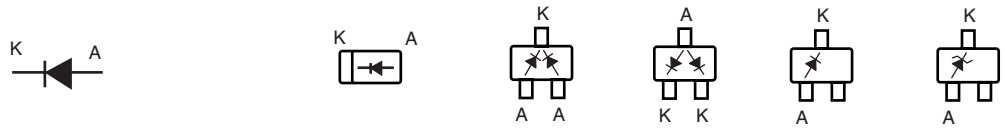
Main “K8Q”

Control (SIDE:B)

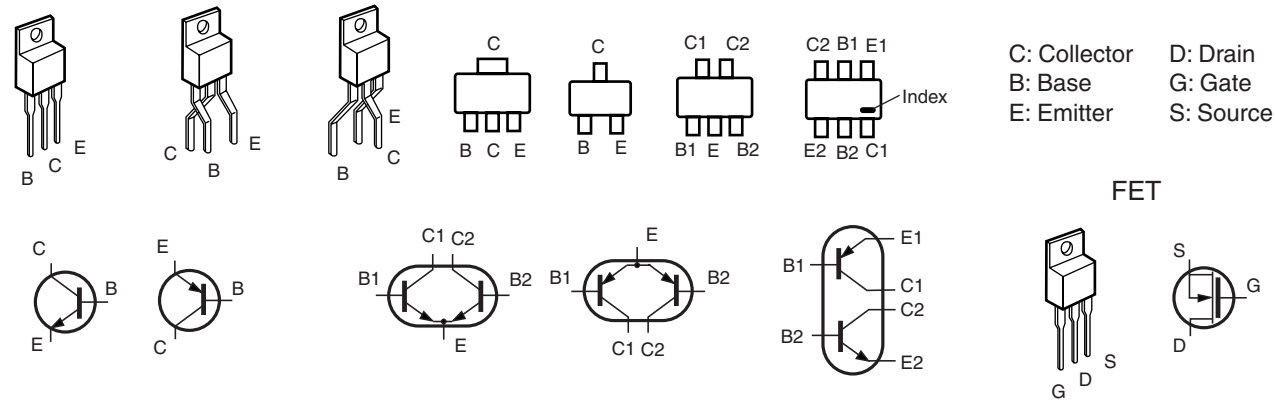


■ Pin description of diode, transistor and IC

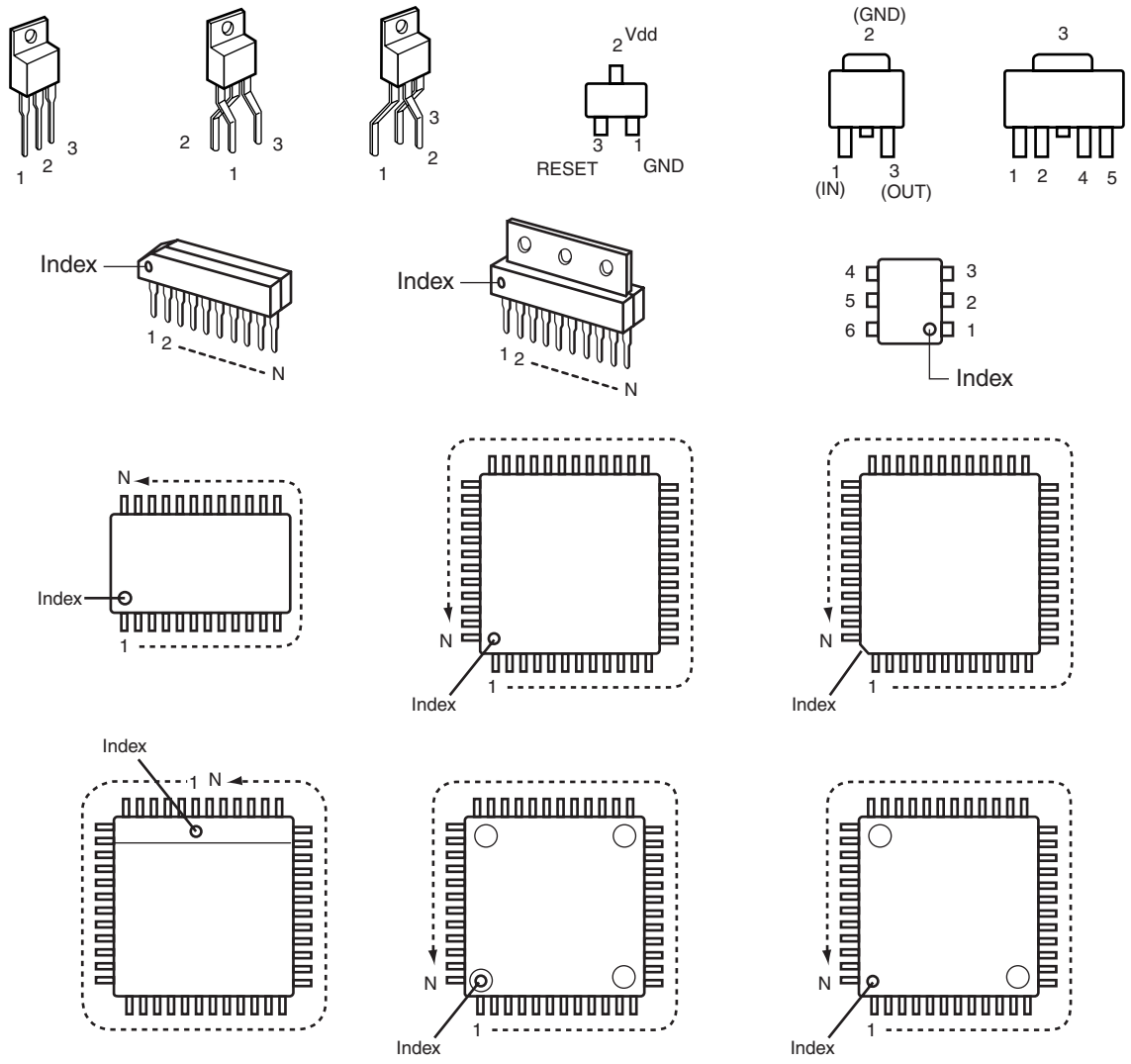
● Diode



● Transistor/FET



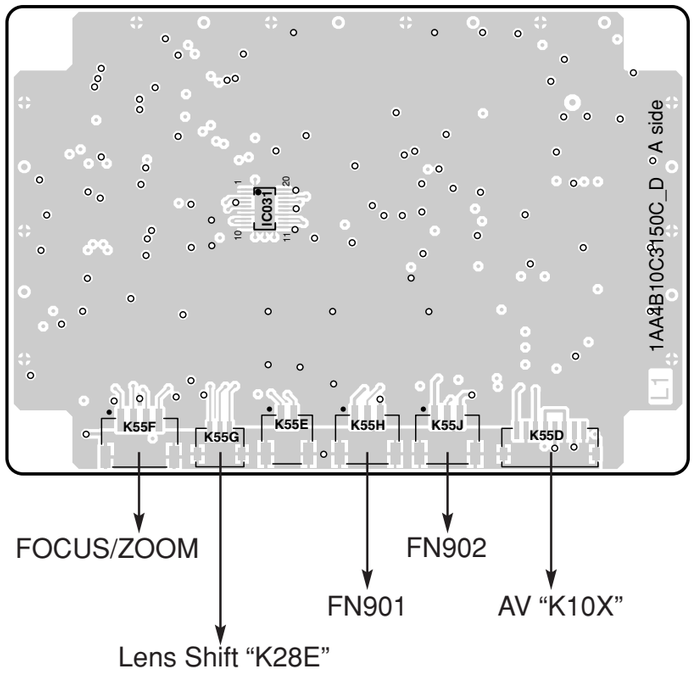
● IC



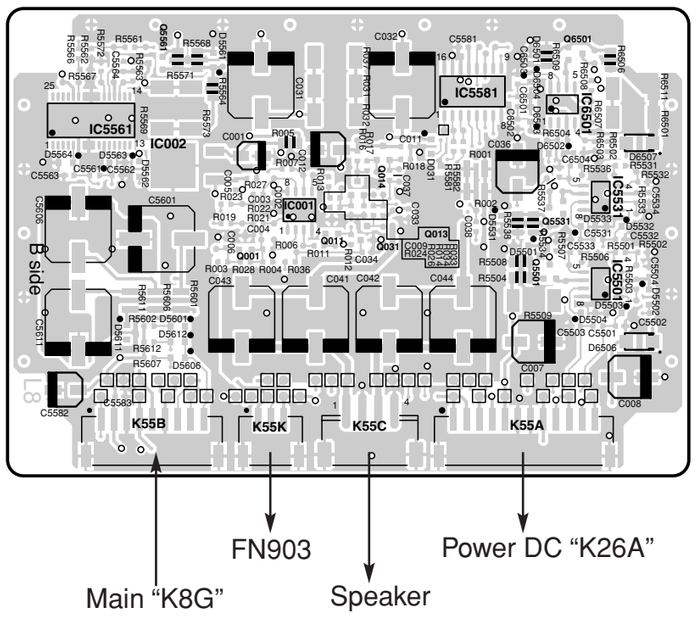
■ Printed Wiring Board Diagrams

> **⚠ CAUTION**
>
> This projector is isolated from AC line by using the internal converter transformer.
> Please pay attention to the following notes in servicing
> 1. Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
> 2. Do not shorten the circuit between hot and cold sides.
> 3. The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

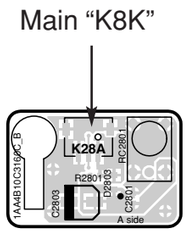
Audio (SIDE:A)



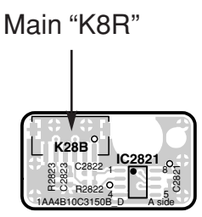
Audio (SIDE:B)



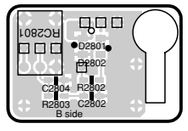
RC Front (SIDE:A)



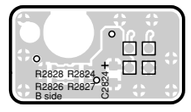
Sensor (SIDE:A)



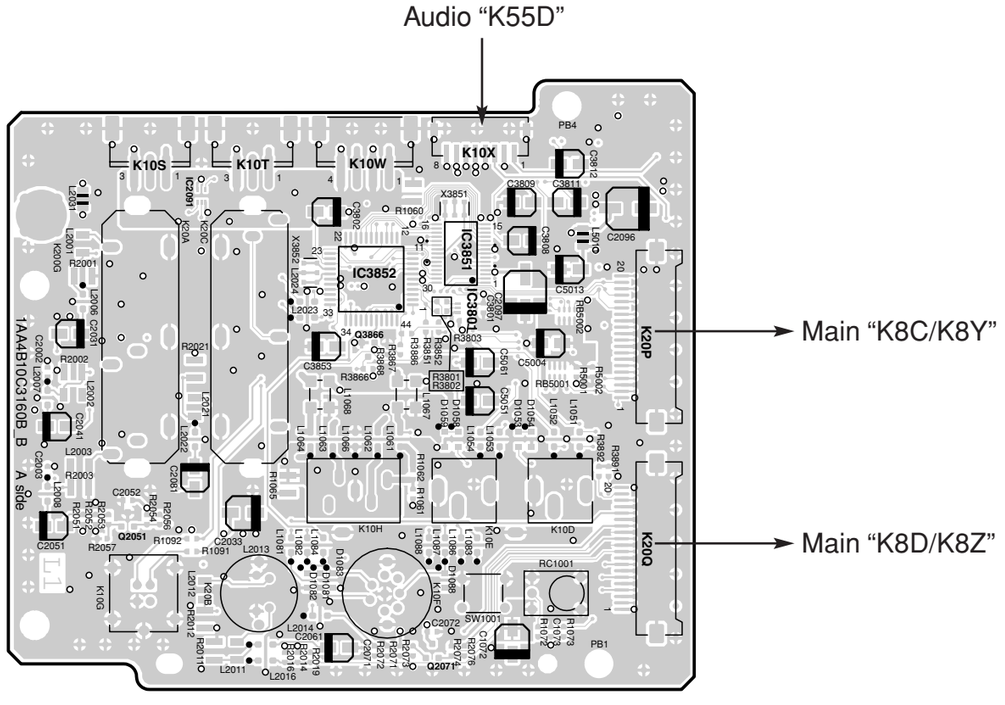
RC Front (SIDE:B)



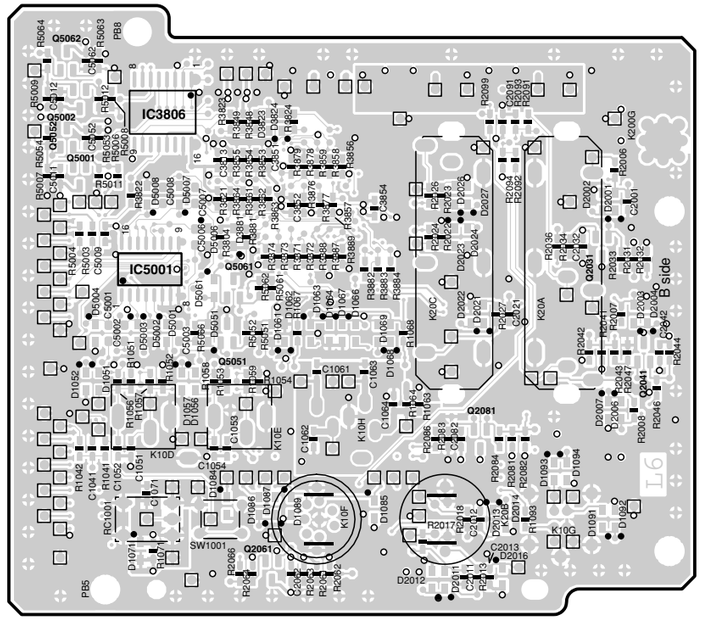
Sensor (SIDE:B)



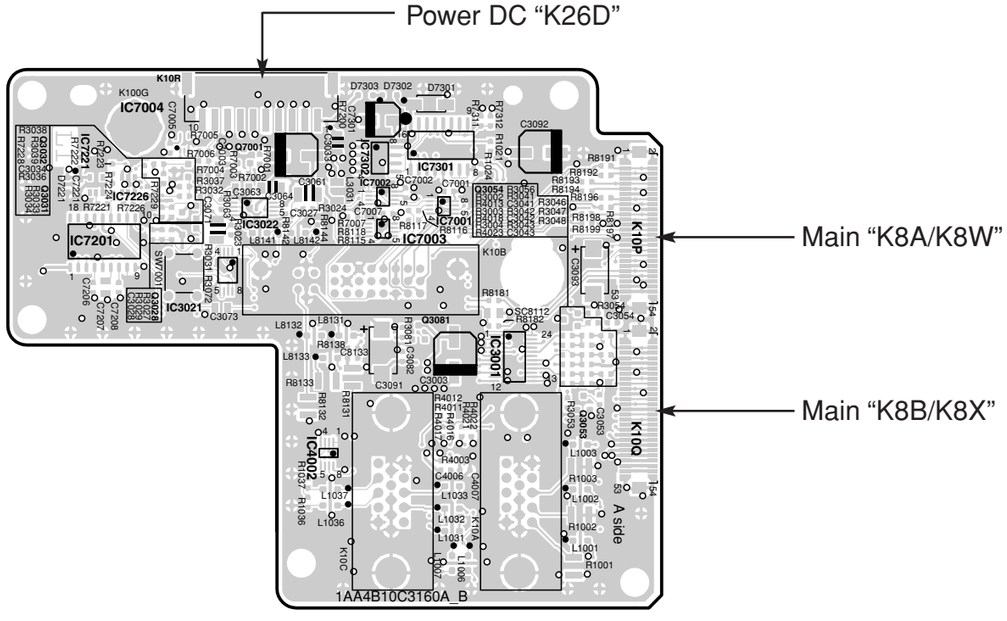
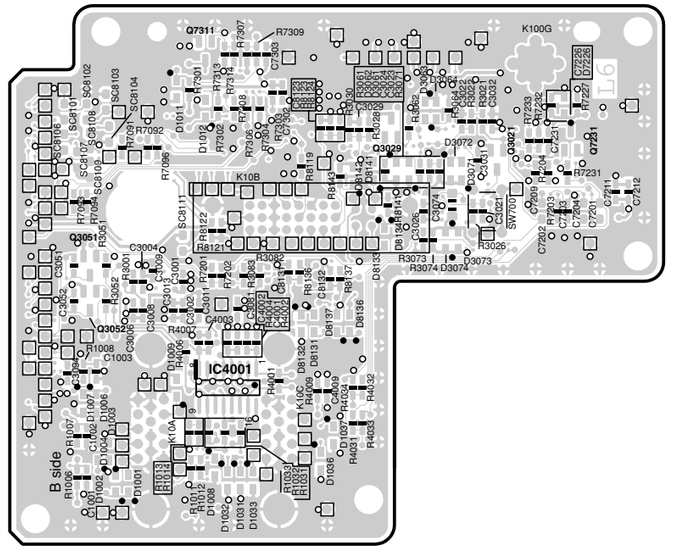
AV (SIDE:A)



AV (SIDE:B)



COM (SIDE:A)



COM (SIDE:B)